SAMSUNG

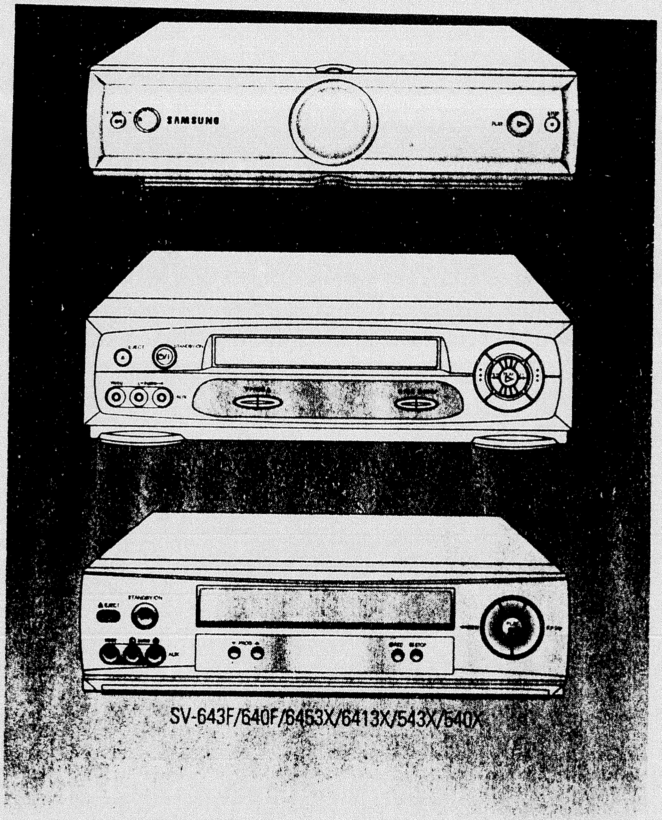
VIDEO CASSETTE RECORDER

Chassis : Scorpio
SV-647F/643F/640F
SV-647X/645X/643X/641X/543X/540X
SV-6453X/6415X/6413X
SV-647B/643B/640B

SERVICE Manual

For mechanical disassembly and adjustment, refer to the "Mechanical Manual" (TS-10 → AC68-01405A).

VIDEO CASSETTE RECORDER



SV-643F/640F/6453X/6413X/543X/540X

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2. Alignment and Adjustment

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4. Electrical Parts List

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IMPORTANT SERVICE GUIDE

◆ MODE SWITCH (PROGRAM SWITCH) ASSEMBLY POINT

1) When installing the ass'y deck on the Main PCB, be sure to align the assembly point of mode switch.

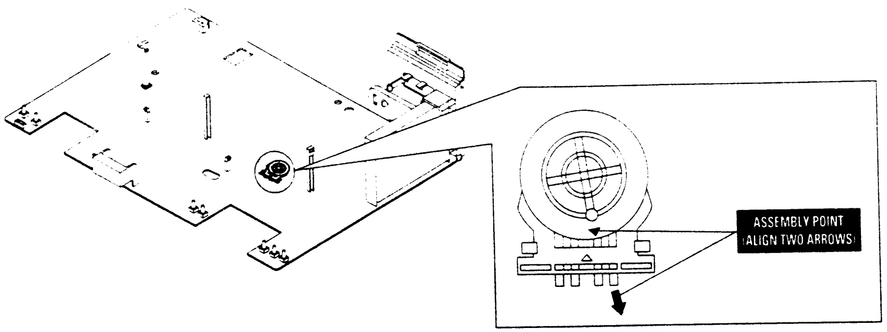


Fig. 1

◆ HOW TO EJECT THE CASSETTE TAPE
(If the unit does not operate on condition that tape is inserted into housing ass'y)

1) Turn the Gear Worm ❶ clockwise in the direction of arrow with screw driver. (See Fig. 2)
(Other method ; Remove the screw of Motor Load Ass'y, Separate the Motor Load Ass'y)
2) When Slider S, T are approached in the position of unloading, rotate holder Clutch counterclockwise after inserting screw driver in the hole of frame's bottom in order to wind the unwiunded tape. (Refer to Fig. 3)
(If you rotate Gear Worm ❶ continuously when tape is in state of unwinding, you may cause a tape contamination by grease and tape damage. Be sure to wind the unwiunded tape in the state of set horizontally.)
3) Rotate Gear Worm ❸ clockwise using screw driver again up to the state of eject mode and then pick out the tape. (Refer to Fig. 2)

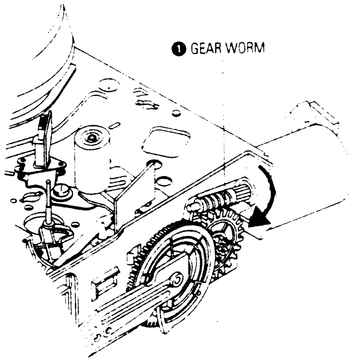


Fig. 2

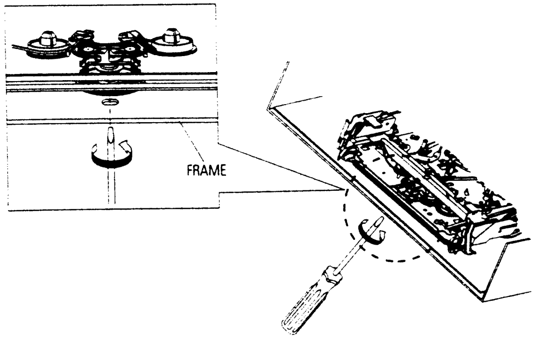


Fig. 3

1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including : control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1-1) :
   Warning : Do not use an isolation transformer during this test. Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

5. **With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts.** The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

6. X-ray Limits :
   The picture tube is designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original.

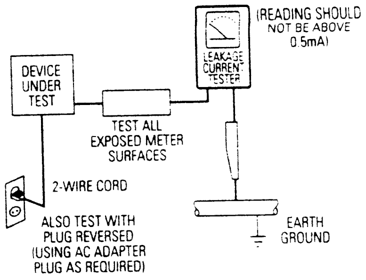

(READING SHOULD NOT BE ABOVE 0.5mA)
LEAKAGE CURRENT TESTER
DEVICE UNDER TEST
TEST ALL EXPOSED METER SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

7. **Antenna Cold Check :
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong.
   Connect the other lead to the coaxial connector.**

8. **High Voltage Limit :
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits.**

   Heed the high voltage limits. These include the X-ray protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

9. **Some semiconductor ("solid state") devices are easily damaged by static electricity.**
   Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

10. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

11. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

12. Design Alteration Warning :
Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors.
Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

13. Hot Chassis Warning :
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

To confirm that the AC power plug is inserted correctly, do the following : Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

14. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.

15. Never defeat any of the B+ voltage interlocks.
Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

16. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

17. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

18. Picture Tube Implosion Warning :
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

19. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

20. Product Safety Notice :
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

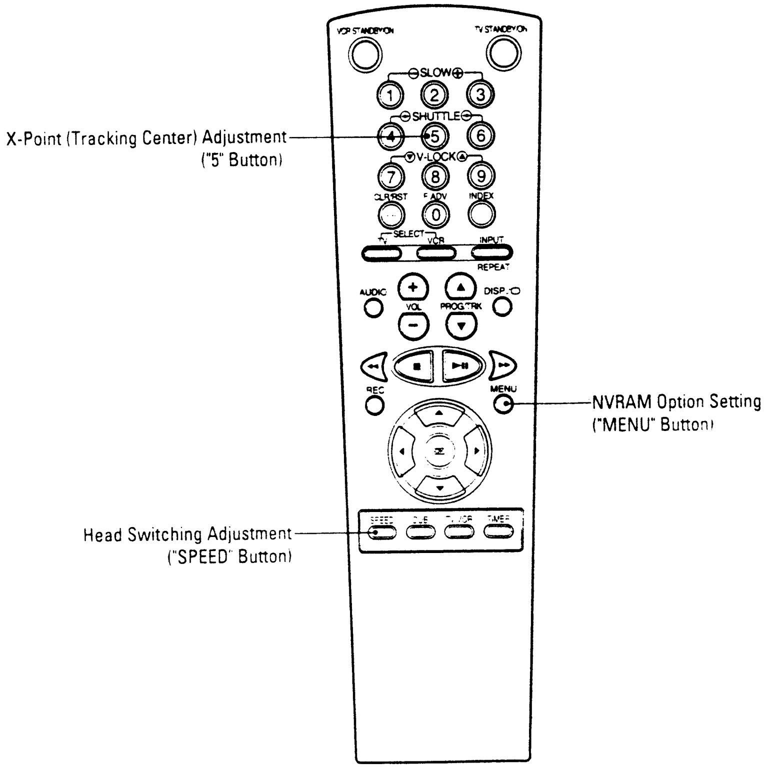
Components that are critical for safety are indicated in the circuit diagram by shading, (⚠ or ⚠).
Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

2. Alignment and Adjustment

2-1 Reference

1) X-Point (Tracking center) adjustment, "Head switching adjustment" and "NVRAM option setting" can be adjusted with remote control
2) When replacing the Micom (IC601) and NVRAM (IC605 ; EEPROM) be sure to adjust the "Head switching adjustment" and "NVRAM option setting".
3) When replacing the cylinder ass'y, be sure to adjust the "X-Point" and "Head switching adjustment".
4) Among Samsung VCR remote control used for adjustment as a accessory, only the remote control that has figures buttons (0 ~ 9) is available for all adjustment regardless of chassis.
5) How to adjustment.
   - Press the "SW718 (SW717)" button on Main PCB to set the adjustment mode.
   - If the corresponding adjustment button is pressed, the adjustment is performed automatically.
   - If the adjustment is completed, be sure to turn the power off.

2-1-1 Location of adjustment button of remote control



Remote Control for adjustment is not supplied as a Service Jig.

Fig. 2-1

2-1-2 SW718 (SW717) location for adjustment mode setting

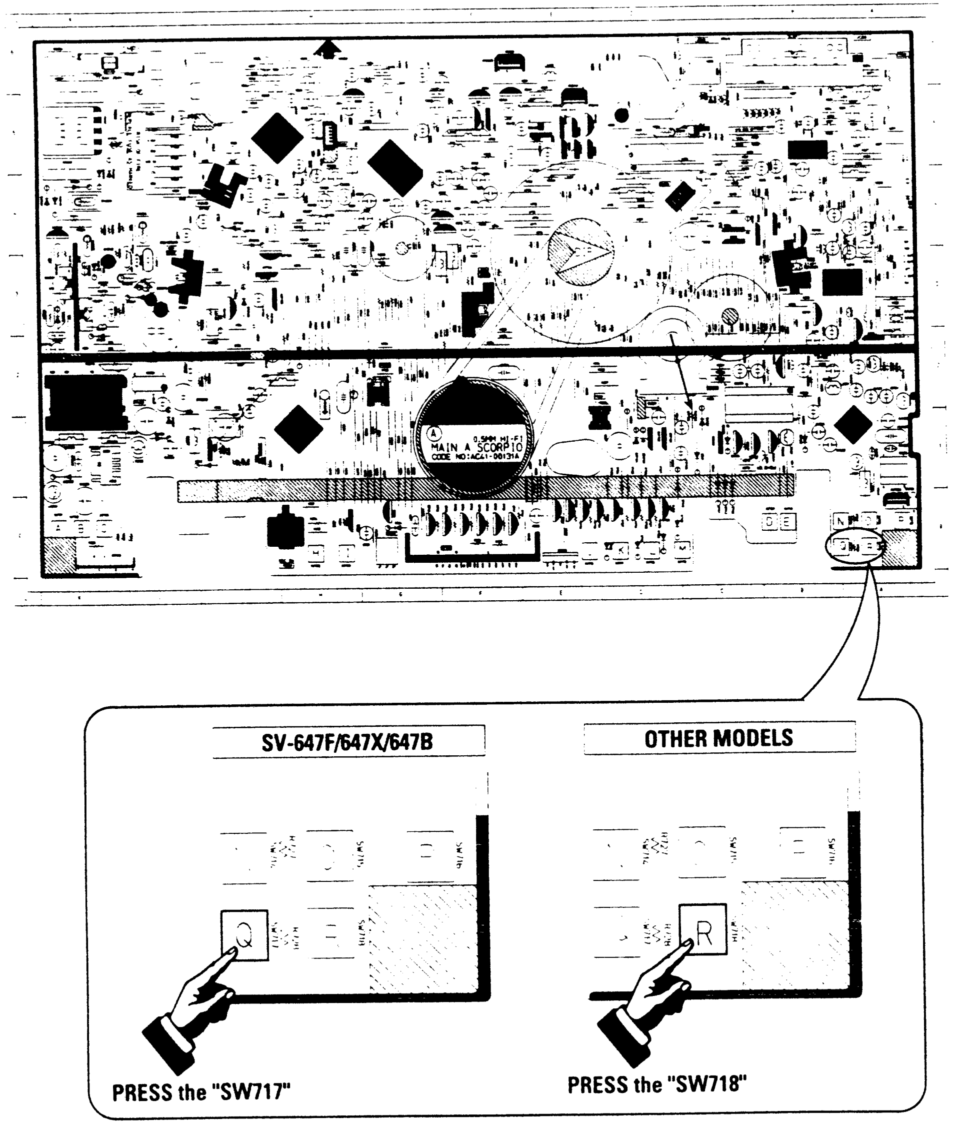


Fig. 2-2 Main PCB (Top View)

2-2 Mechanical Adjustment

Note : Refer to the Mechanical Manual "TS-10 (AC68-01405A)" for the adjustment and confirmation of ass'y full deck.

2-2-1 The number and position of test point

Test point :	TP601 (Control pulse)	TP301 (Envelope)
	TP602 (H'D S/W -Trigger)	TP302 (Audio output)
		TP303 (Video output)

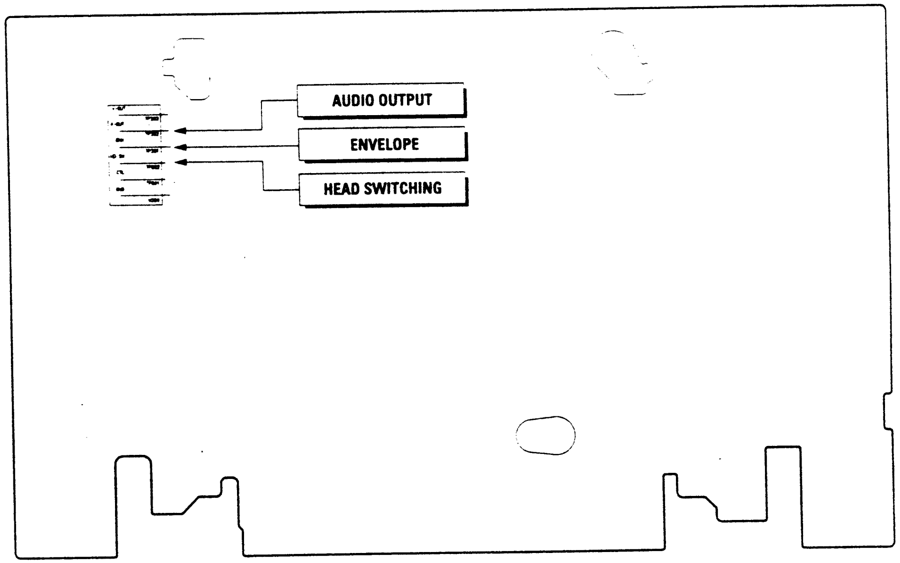


Fig. 2-3 Location of Test point (Main PCB-Top View)

2-2-2 ACE Head Position (X-Point) Adjustment

(See the 2-2-1(d) ACE Head Position (X-Point) Adjustment on page 2-2 of the Mechanical Manual)

1) Playback the alignment tape (Color bar).
2) Press the "SW718 (SW717)" button on Main PCB to set the adjustment mode. (See Fig. 2-2)
3) Press the "5" button of remote control then adjustment is operated automatically. (See Fig. 2-1)
4) Connect the CH-1 probe to TP301 (Envelope) the CH-2 probe to TP602 (H'D switching pulse) and then trigger to CH-1.
5) Insert the (-) driver into the X-Point adjustment hole and adjust it so that envelope waveform is maximum.
6) Turn the Power off.

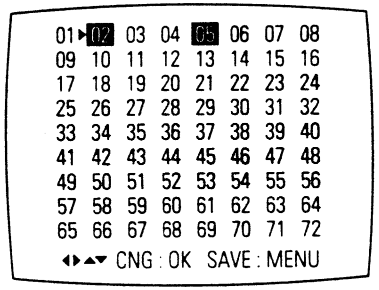
2-3 Head Switching Point Adjustment

1) Playback the alignment tape.
2) Press the "SW718 (SW717)" button on Main PCB to set the adjustment mode. (See Fig. 2-2)
3) Press the "SPEED" button of remote control then adjustment is operated automatically. (See Fig. 2-1)
4) Turn the Power off.

2-4 NVRAM Option Setting

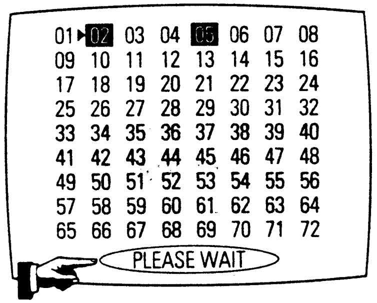
1) NVRAM Option is adjusted at production line basically.
2) In case Micom (IC601) and NVRAM (IC605 ; EEPROM) is replaced, be sure to set the corresponding option number of the repaired model. (If the option is not set, the unit is not operated.)

1) Press the "SW718 (SW717)" button on Main PCB to set the adjustment mode. (See Fig. 2-2)
2) Press the "MENU" button on the remote control about 5 seconds then option setting display is appeared. (See Fig. 2-4)
3) Select the option number (See Table 2-1) of corresponding model with "CURSOR" button on the remote control.
4) If selecting the option number is completed, press the "OK" button of remote control. (If "OK" button is pressed, the selected number is changes reversed color. ; See Fig. 2-4)
5) Press the "MENU" button of remote control again to store the option number. ("PLEASE WAIT" is displayed for a second as shown Fig. 2-5 and this setting is completed.)
6) Turn the Power off.



01▸02 03 04 05 06 07 08
09 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56
57 58 59 60 61 62 63 64
65 66 67 68 69 70 71 72
◂▸▴▾ CNG : OK SAVE : MENU

Fig. 2-4



01▸02 03 04 05 06 07 08
09 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56
57 58 59 60 61 62 63 64
65 66 67 68 69 70 71 72
PLEASE WAIT

Fig. 2-5

<Table 2-1 NVRAM Option Number>

COUNTRY	MODELS	OPTION NUMBER
France	SV-647F	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 21, 26, 29, 30, 31, 32, 33, 34, 35, 36, 39, 40, 46, 47, 50, 60, 61, 63
	SV-643F	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 21, 26, 29, 30, 33, 34, 35, 36, 38, 40, 45, 47, 52, 60, 61, 63
	SV-640F	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 20, 21, 26, 30, 33, 34, 35, 36, 38, 40, 45, 47, 52, 60, 61, 63
U.K.	SV-647B	3, 4, 5, 6, 8, 9, 10, 11, 14, 15, 19, 27, 29, 30, 31, 32, 34, 39, 40, 41, 46, 47, 50, 53, 60, 61, 63
	SV-643B	3, 4, 5, 6, 8, 9, 10, 14, 15, 27, 30, 34, 38, 40, 41, 45, 47, 51, 53, 60, 61, 63
	SV-640B	4, 5, 6, 8, 9, 10, 14, 15, 27, 30, 34, 38, 40, 41, 45, 47, 51, 53, 60, 61, 63
Germany	SV-647X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 34, 36, 39, 40, 42, 46, 47, 50, 60, 61, 63
Spain	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-643X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 34, 36, 38, 40, 42, 45, 47, 52, 60, 61, 63
	SV-540X	4, 5, 6, 9, 10, 11, 13, 14, 15, 20, 30, 32, 38, 40, 42, 45, 47, 52, 60, 61, 63
Italy	SV-647X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 34, 36, 39, 40, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-6415X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-6413X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 34, 36, 38, 40, 42, 45, 47, 52, 60, 61, 63
	SV-641X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-543X	2, 4, 5, 6, 9, 10, 11, 13, 14, 15, 20, 30, 38, 40, 42, 45, 47, 52, 60, 61, 63
Portugal	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 34, 36, 38, 40, 42, 45, 47, 52, 60, 61, 63
Denmark	SV-647X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 34, 36, 39, 40, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 34, 36, 38, 40, 42, 45, 47, 52, 60, 61, 63
Sweden/Finland/ Norway	SV-647X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 34, 36, 39, 40, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 34, 36, 38, 40, 42, 45, 47, 52, 60, 61, 63
Netherlands/ Belgium	SV-647X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 34, 36, 39, 40, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 34, 36, 38, 40, 42, 45, 47, 52, 60, 61, 63
	SV-643F	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 21, 26, 29, 30, 33, 34, 35, 36, 38, 40, 45, 47, 52, 60, 61, 63
	SV-640F	4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 20, 21, 26, 30, 33, 34, 35, 36, 38, 40, 45, 47, 52, 60, 61, 63
Switzerland	SV-647X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 34, 36, 39, 40, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
Austria	SV-647X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 34, 36, 39, 40, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 51, 60, 61, 63
	SV-6453X	2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 29, 30, 32, 34, 36, 38, 40, 42, 45, 47, 52, 60, 61, 63
Greece	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 33, 35, 38, 42, 45, 47, 52, 60, 61, 63
Cyprus	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
Croatia	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
Slovenia	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
Yugo	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 33, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
Hungary	SV-647X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 33, 34, 36, 39, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 33, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 33, 34, 36, 38, 42, 45, 47, 52, 60, 61, 63
Romania	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 33, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 33, 34, 36, 38, 42, 45, 47, 52, 60, 61, 63
Czech.	SV-647X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 33, 34, 36, 39, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 33, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 33, 34, 36, 38, 42, 45, 47, 52, 60, 61, 63
Bulgaria/ Macedonia	SV-647X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 33, 34, 36, 39, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 33, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 33, 34, 36, 38, 42, 45, 47, 52, 60, 61, 63
Poland	SV-647X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 19, 20, 29, 30, 31, 32, 33, 34, 36, 39, 42, 46, 47, 50, 60, 61, 63
	SV-645X	2, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 32, 33, 34, 36, 38, 42, 45, 47, 51, 60, 61, 63
	SV-641X	4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 20, 30, 33, 34, 36, 38, 42, 45, 47, 52, 60, 61, 63

MEMO

3. Exploded View and Parts List

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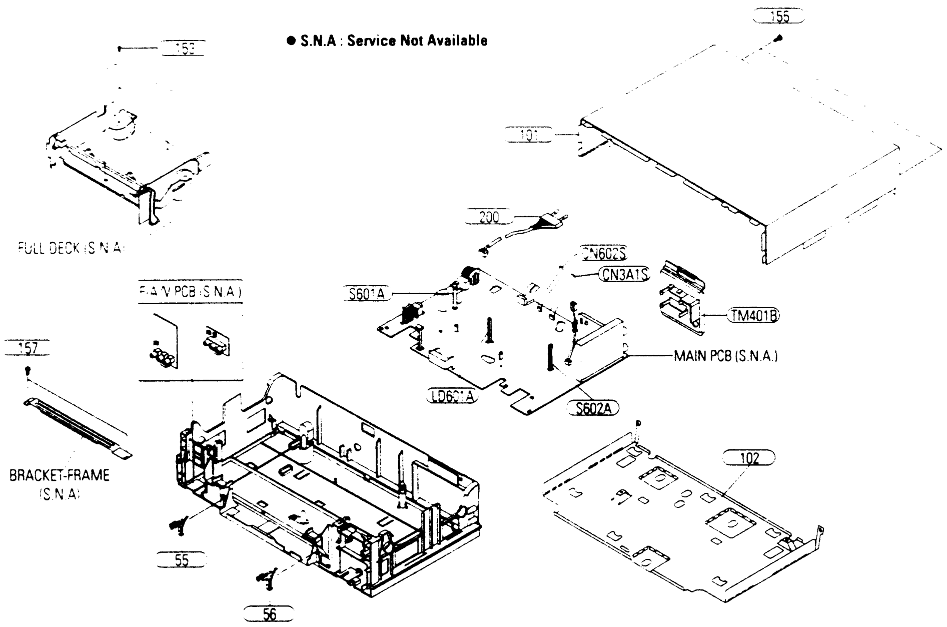
3-1 Cabinet Assembly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155
101
200
FULL DECK (S.N.A)
CN602S
CN3A1S
F-A/V PCB (S.N.A)
S601A
TM401B
MAIN PCB (S.N.A)
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LD601A
S602A
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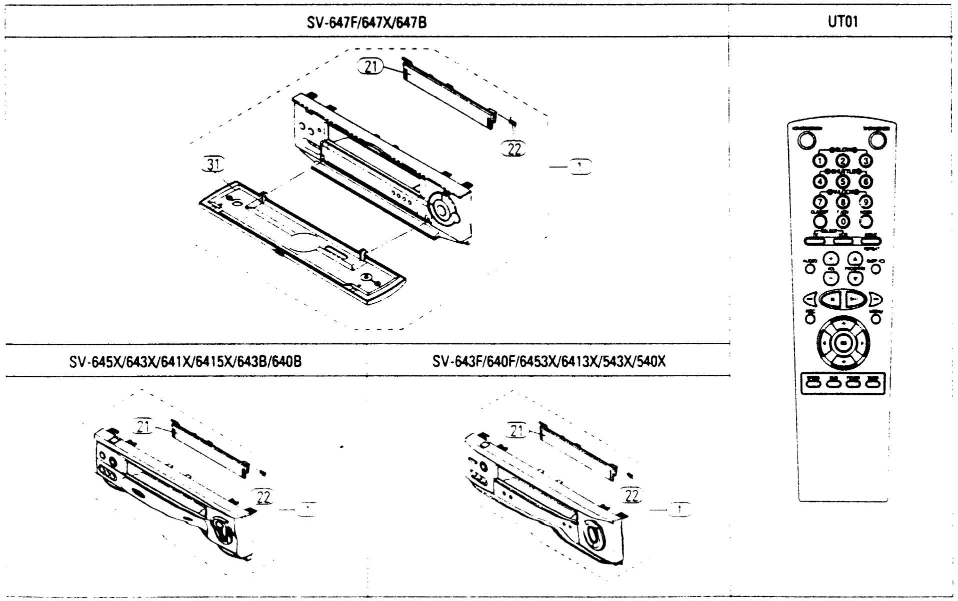
BRACKET-FRAME
(S.N.A)
55
56


SV-647F/647X/647B
UT01
21
22
1
31
SV-645X/643X/641X/6415X/643B/640B
SV-643F/640F/6453X/6413X/543X/540X
21
22
1
21
22
1

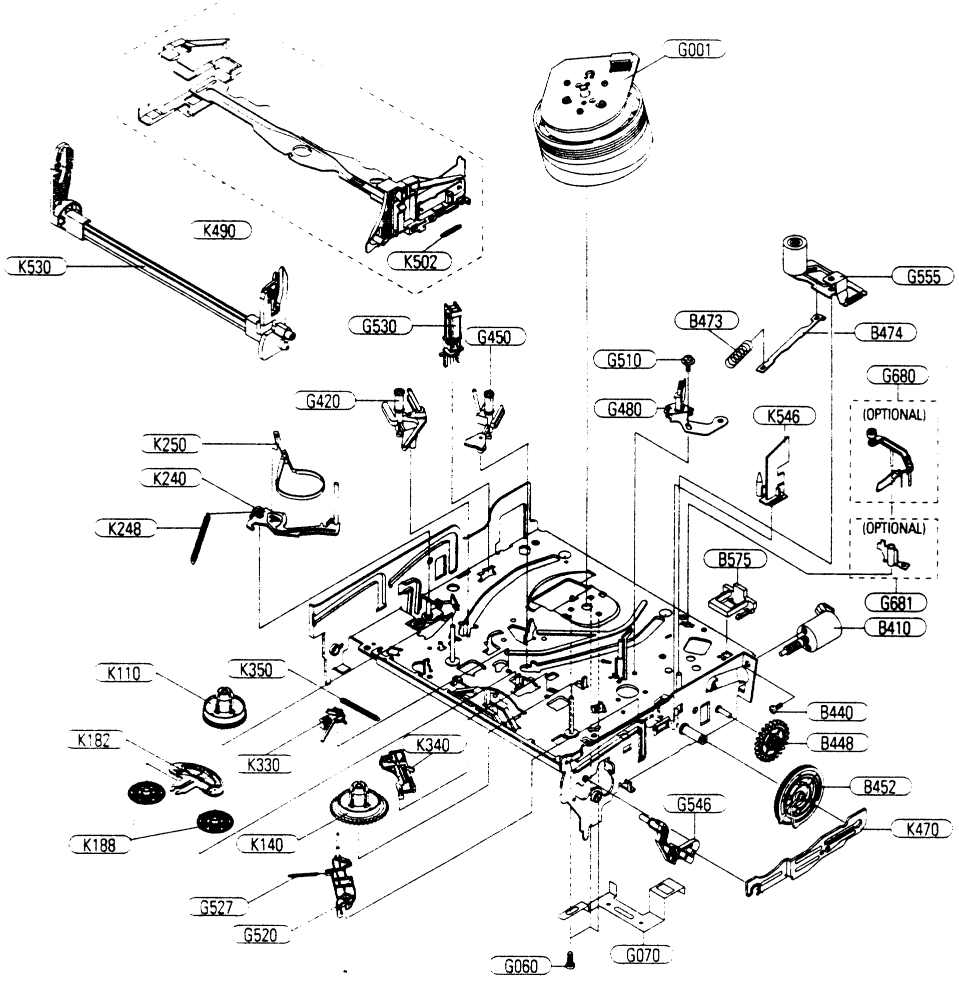
[illegible]	Parts No.	Description ; Specification	Remark
1	**Refer to table ; page 3-4**	ASSY-PANEL-FRONT	
21	**Refer to table ; page 3-4**	DOOR-CASSETTE	
22	AC61-62032A	SPRING-MASK;X-9,-,SUS,-,4.4,-,SV-C130	
31	**Refer to table ; page 3-4**	DOOR-FRONT ASSY	
55	AC61-30164D	LOCKER-CODO ASSY L;-,LUCEL+SECC+SUS,-,-.	OPTIONAL
56	AC61-30164C	LOCKER-CODO ASSY R;-,LUCEL+SECC+SUS,-,BL	OPTIONAL
101	AC64-00400A	CABINET-TOP;SV-2300X,-,PCM(SECC),	
102	AC63-00015A	COVER-BOTTOM;-,SECC,-,T;0.5,SECC T0.5,-,	
153	AC60-12126A	SCREW-BH;-,BH,-,4*12,FE,FZY,-,-,-	
155	AC60-12134A	SCREW-TAP BH;-,BH,-,2-4X16,-,FE	
157	AC60-10063A	SCREW-TAPTITE;BH,+,-,M3,L12,ZPC3,SWRCH18	
200	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-K	COMMON
	AC39-12022K	POWER CORD;Y352160,H03VVH2-F,-,BS6500	U.K. ONLY
CN3A1S	3809-001206	CABLE-FLAT;30V,-20to+80C,140mm,6P,1.25mm	
CN602S	3809-001111	CABLE-FLAT;30V,80C,130mm,7P,1.25mm,UL289	
LD601A	AC61-21009A	HOLDER-LED;-,POM(M90-44),-,BLK,-,X-9	
S601A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9	
S602A	AC61-21008A	HOLDER-SENSOR;-,POM(M90-44),-,BLK,-,X-9	
TM401B	AC61-00148A	CHASSIS-ASSY;CHASSIS-ASSY;SV-643F/XEF,HIPS94HB(MOLD)	COMMON
	AC61-00152A	CHASSIS-ASSY;V-611UK,HIPS94HB(MOLD)	U.K. ONLY
UT01	**Refer to table ; page 3-4**	REMOCON-ASSY	

[illegible]	MODELS	1	[illegible]	21	UT01
France	SV-647F	AC97-00249G	AC64-00403H	AC64-00654G	AC59-00048D
	SV-643F	AC97-01293J	AC64-00572T	-	AC59-00048D
	SV-640F	AC97-01294H	AC64-00572M	-	AC59-00048D
U.K	SV-647B	AC97-00249F	AC64-00403D	AC64-00654H	AC59-00048C
	SV-643B	AC97-00243R	AC64-00403J	AC64-00072Z	AC59-00048C
	SV-640B	AC97-01314A	AC64-00683C	-	AC59-00049C
Germany	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
Spain	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-643X	AC97-01365D	AC64-00683H	-	AC59-00048C
	SV-641X	AC97-01293A	AC64-00572N	-	AC59-00048C
	SV-540X	AC97-01293F	AC64-00572U	-	AC59-00048C
Italy	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-6415X	AC97-01365F	AC64-00683K	-	AC59-00049C
	SV-6413X	AC97-01293G	AC64-00572W	-	AC59-00049C
	SV-641X	AC97-01365G	AC64-00683V	-	AC59-00049C
	SV-543X	AC97-01293K	AC64-00572Z	-	AC59-00049C
Portugal	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293A	AC64-00572N	-	AC59-00048C
Denmark	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C
Sweden/Finland/ Norway	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C
Netherlands/ Belgium	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00049C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C
	SV-643F	AC97-01293J	AC64-00572T	-	AC59-00048D
	SV-640F	AC97-01294H	AC64-00572M	-	AC59-00049D
Switzerland	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
Austria	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-6453X	AC97-01293H	AC64-00572X	-	AC59-00048C
Greece	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C

<Continued>

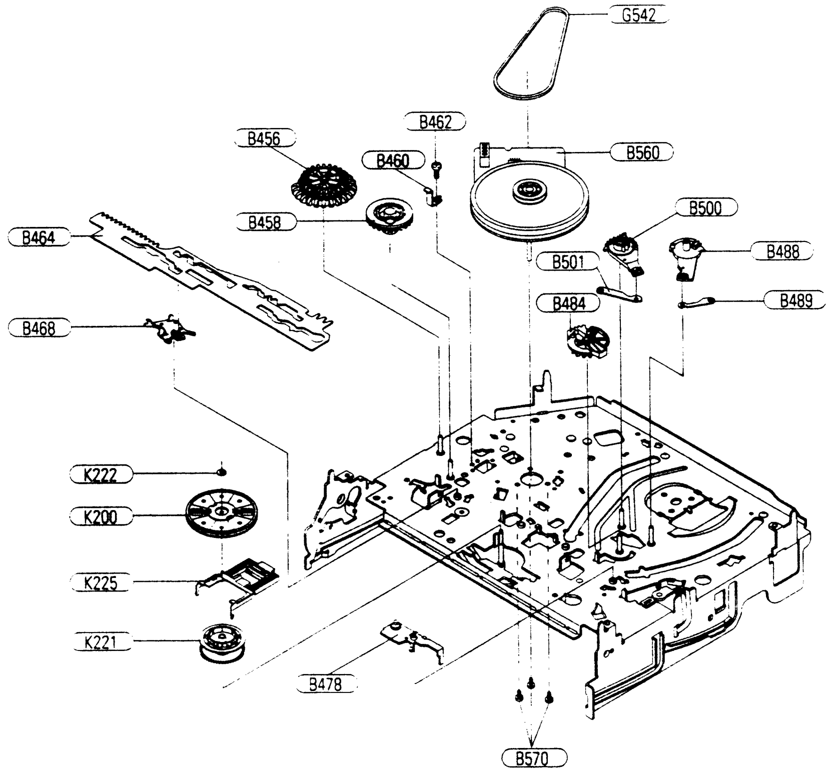
COUNTRY	MODELS	1	21	31	UT01
Cyprus	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
Croatia	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
Slovenia	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
Yugo	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
Hungary	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C
Romania	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C
Czech.	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C
Bulgaria/Macedonia	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C
Poland	SV-647X	AC97-00249E	AC64-00403C	AC64-00654C	AC59-00048C
	SV-645X	AC97-01291F	AC64-00683D	-	AC59-00048C
	SV-641X	AC97-01293E	AC64-00572F	-	AC59-00049C

3-2 Mechanical Parts (Top Side)



No	Parts No.	Description ; Specification	Remark
B410	AC31-00012A	MOTOR-LOADING ASSY;-,TS-10,-,-,-,-,-,-,-	
B440	AC60-10515A	SCREW-MACHINE;-,PH,+,-,M3,L3,ZPC,-,YEL	
B448	AC66-00008A	GEAR-WORM WHEEL;TS-10,POM,0.8,40,-,NAT,3	
B452	AC66-00011A	GEAR-FL CAM;TS-10,POM,0.8,59,-,BLK,48.48	
B473	AC61-00105A	SPRING-PINCH DRIVE;TS-10,SUS304-WPB,-,-.	
B474	AC61-30180A	PLATE-JOINT;-,SECC20/20,T0.8,-,X-9	
B575	AC47-00002A	DAMPER-CAPSTAN;TS-10,POM,-,-,BLACK	
G001	AC97-01352A	ASSY-CYLINDER;SECAM,CTS10,6HF	Only for FRANCE models
	AC97-01205A	ASSY-CYLINDER;PAL,CTS10,6HD	COMMON
G060	6006-001092	SCREW-ASS'Y MACH;WS,PH,+,M3.0,L6.0,ZPC(Y	
G070	AC61-00161A	PLATE-GROUND DECK;TS-10,SPTE,T0.3,-	
G420	AC66-80142A	SLIDER-SUPPLY ASSY;-,X-9(TS),-,-,-,X-9	
G450	AC66-80141A	SLIDER-TAKE UP ASSY;-,X-9(TS),-,-,-,X-9	
G480	AC33-00009A	HEAD-ACE ASS'Y;-,PPS,TS-10,-,-	
G510	6006-001075	SCREW-ASS'Y TAPT;WSP,PH,+,M2.6,L5.0,ZPC(	
G520	AC66-00033A	LEVER-#9 GUIDE ASS'Y;TS-10,-,-,-,-,-,-,-	
G527	AC61-60553A	SPRING-#9 GUIDE;-,ES,SUS304-WPB,OD3.1,0.	
G530	AC33-00007A	HEAD-FE;-,-,HVFHP0043A,-,-	
G546	AC66-00005A	LEVER-FL DOOR;TS-10,POM,-,-,-,-,NAT,-	
G555	AC66-00032A	LEVER-UNIT PINCH ASS'Y;TS-10,-,-,-,-,-,-	
G680	AC66-00046A	LEVER-HEAD CLEANER ASS'Y;TS-10,POM+URETH	(OPTIONAL)
G681	AC61-50686A	SLEEVE-HEAD CLEANER;-,POM,-,-,-,-,-,-,TS	(OPTIONAL)
K110	AC66-10267A	REEL-DISK S;X-9,POM,-,-,-,-,-,-	
K140	AC66-10268A	REEL-DISK T;X-9,POM,-,-,-,-,-,-	
K182	AC66-30524A	LEVER-IDLER;-,POM,-,-,-,-,-,-	
K188	AC66-00039A	GEAR-IDLE;TS-10,PET K3372,0.5,-,-,NTR,28	
K240	AC66-00035A	LEVER-TENSION ASS'Y;TS-10,SECC E20/20+SU	
K248	AC61-00107A	SPRING-TENSION LEVER;TS-10,SUS304-WPB,-,	
K250	AC69-00104A	BAND-BRAKE ASS'Y;TS-10,-,-,-,-,-,-	
K330	AC66-30550A	LEVER-S.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K340	AC66-30549A	LEVER-T.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K350	AC61-00106A	SPRING-BRAKE;TS-10,SUS304-WPB,-,-,-,-,-.	
K470	AC66-00020A	SLIDER-FL DRIVE;TS-10,SECC E20/20,1.0,-.	
K490	AC61-00120A	HOLDER-FL CASS. ASS'Y;TS-10,-,-,-,-,-	
K502	AC61-60561A	SPRING-FL.LEVER-LR;-,ES,SUS304 WPB,PI2.7	
K530	AC66-00034A	LEVER-FL ARM ASS'Y;TS-10,-,-,-,-,-,-,-	
K546	AC61-50658A	GUIDE-CASS. DOOR;X-9,POM,-,NTR,-,-	

3-3 Mechanical Parts (Bottom Side)



[illegible] No	Parts No.	Description ; Specification	Remark
B456	AC66-00009A	GEAR-JOINT 1;TS-10,POM,1.5,17.5(22),-,NA	
B458	AC66-00012A	GEAR-JOINT 2;TS-10,POM,1.0,23,-,BLK,24.6	
B460	AC61-00090A	BRACKET-GEAR;TS-10,0.8,-,-	
B462	AC60-10517A	SCREW-TAP TITE;-,PH,+,-,M2.6,L5,ZPC,-,YE	
B464	AC66-00019A	SLIDER-CAM;TS-10,SECC E20/20,1.2,-,-,-,-	
B468	AC66-00017A	LEVER-PINCH DRIVE;TS-10,SECC E20/20,1.0	
B478	AC66-00016A	LEVER-TENSION DRIVE;TS-10,SECC E20/20,1	
B484	AC66-00030A	GEAR-LOADING DR. ASS'Y;TS-10,POM+SWPB,-,	
B488	AC66-00023A	LEVER-S LOADING;TS-10,POM,-,-,-,-,NAT,-	
B489	AC66-00021A	LINK-LOADING S;TS-10,SECC E20/20,0.8,-,-	
B500	AC66-00024A	LEVER-T LOADING;TS-10,POM,-,-,-,-,NAT,-	
B501	AC66-00022A	LINK-LOADING T;TS-10,SECC E20/20,0.8,-,-	
B560	AC31-00010A	MOTOR-CAPSTAN;-,SANKYO,-,-	
B570	AC60-10514A	SCREW-CAPSTAN;-,PH,+,M2.6,L6,-	
G542	AC66-60051A	BELT-PULLEY;-,5CM-70,2 * 2,-,71.3,-,X-9	
K200	AC61-21012A	HOLDER-CLUTCH ASSY;-,-,-,-,-,X-9	
K221	AC66-20581A	GEAR-CENTER ASSY;-,POM,M=0.5,-,HIGHT T.,	
K222	AC60-30306A	WASHER-SLIT;-,-,ID2.1,OD5.0,T0.5,-,POLYS	
K225	AC66-00006A	LEVER-UP DOWN;TS-10,POM,-,-,-,-,NAT,-	

MEMO

4. Electrical Parts List

Loc.No	Part No	Description ; Specification	Remark
		ASSY PCB-MAIN-FULL	S.N.A.
S.M.P.S. PARTS			
BD1SD1	AC27-92001M	INDUCTOR,70UH-M,RT,BFS3565R2F,-,-,-	
BD1SR1	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400	
BD1SS2	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400	
BD1SS3	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400	
C1SD03	2201-000812	C-CERAMIC,DISC;2.2nF,20%,400V,Y5U,BK,12	
C1SD04	2201-000812	C-CERAMIC,DISC;2.2nF,20%,400V,Y5U,BK,12	
C1SD11	2401-003302	C-AL;47uF,20%,400V,GP,TP,18X31.5,7	
C1SD12	2305-001029	C-FILM,MPEF;10nF,10%,630V,TP,12x9x12,5.5	
C1SD13	2301-000361	C-FILM,PEF;1.2nF,10%,50V,TP,-,5mm	
C1SR12	2401-000905	C-AL;22uF,20%,16V,BP,-,6x11,2.5mm	
C1SR14	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C1SS01	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13	⚠
C1SS02	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13.	⚠
C1SS31	2401-000385	C-AL;10uF,20%,100V,GP,TP,6.3x11,5	
C1SS32	2401-003137	C-AL;330UF,20%,50V,WT,TP,10X16MM,5	
C1SS33	2401-003477	C-AL;330UF,20%,25V,LZ,TP,10X12.5MM.	
C1SS34	2401-003477	C-AL;330UF,20%,25V,LZ,TP,10X12.5MM.	
C1SS35	2401-003480	C-AL;1000UF,20%,10V,LZ,TP,10X16MM,5	
C1SS36	2401-001479	C-AL;470uF,20%,10V,GP,TP,-,-	
C1SS39	2301-000129	C-FILM,PEF;100nF,5%,50V,TP,10X9X4.3X5,5m	
CN1SS1	3711-000178	CONNECTOR-HEADER;1WALL,2P,1R,3.96mm,STRA	
D1SD11	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SD31	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SR11	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35.	
D1SS01	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS02	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS03	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS04	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS11	0402-000012	DIODE-RECTIFIER;UF4007,1KV,1A,DO-41,TP	
D1SS31	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS32	0402-001194	DIODE-RECTIFIER;UG2D,200V,2A,DO-204AC,TP	
D1SS33	0404-001097	DIODE-SCHOTTKY;SG45,45V,7500mA,TO-220A,B	
F1SS01	3601-001123	FUSE-CARTRIDGE;250V,1.6A,TIME-LAG,CERAMI	⚠
IC1SS1	0604-001028	PHOTO-COUPLER;TR,50-600%,250mW,DIP-4,ST	⚠
IC1SS2	AC14-12006D	IC;KA431Z,TO-92,TAPING	
L1SS02	AC29-00002A	FILTER LINE NOISE;-,30mH,-,-,BLF-2116	⚠
L1SS31	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,080,150KHZ,-	
L1SS32	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,080,150KHZ,-	
PT1SS1	AC26-00002G	TRANS SWITCHING;EE2521,SV-643F,-,230V,FE	⚠
Q1SR01	0502-001050	TR-POWER;2SC4517A,NPN,30W,TO-220,ST,10-	
Q1SR02	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9	
R1SD11	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD12	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SD13	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD14	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD15	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD16	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x	
R1SD31	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD32	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1SR11	2003-000119	R-METAL OXIDE;0.68ohm,5%,2W,AE,TP,6x16mm	
R1SR12	2003-000264	R-METAL OXIDE;300ohm,5%,1W,AD,TP,4.3x12m	
R1SR14	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SS10	2006-000262	R-CEMENT;2.7ohm,10%,2W,CB,TP,7.5x11x20	
R1SS11	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x	
R1SS32	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R1SS33	2004-000869	R-METAL;3Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R1SS34	2004-000459	R-METAL;2.2Kohm,1%,1/8W,AA,TP,1.8x3.2m	
VA1SS1	1405-001026	VARISTOR;470V,600A,9x7mm,TP	⚠
ZD1SS1	0403-000571	DIODE-ZENER;UZP43B,43V,40-46V,1W,DO-41,T	
POWER DRIVE PARTS			
C1P102	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	
C1P103	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7.5	
C1P104	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7.5	
C1P105	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	
C1P106	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	
C1P108	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7.5	
D1P101	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35	
D1P103	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35.	
Q1P101	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P102	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P103	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q1P104	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L.	
Q1P105	0504-000115	TR-DIGITAL;KSR1001,NPN,300MW,4.7K,4.7K,T	
R1P101	2001-000855	R-CARBON;560OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P102	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R1P103	2001-000036	R-CARBON;330OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P104	2001-000027	R-CARBON;100OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P105	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R1P106	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1P107	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R1P108	2001-000611	R-CARBON;3.9KOHM,5%,1/4W,AA,TP,2.4X6.4M	
ZD1P02	0403-000717	DIODE-ZENER;MTZJ5.1B,5.1V,4.94-5.2V,500m	
ZD1P03	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
SYSTEM CONTROL/SERVO PARTS			
BD601	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
C601	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11.5	
C602	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C603	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
C604	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
C605	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C606	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C607	2401-000118	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C607	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	BACK-UP (1HR) ONLY
C608	2203-000575	C-CERAMIC,CHIP;220NF,10%,25V,X7R,TP,2012	
C609	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C611	2301-000174	C-FILM,PEF;15nF,5%,100V,TP,7.2x4.9x7.5mm	
C612	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP	
C613	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C615	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
C616	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C617	2401-000591	C-AL;1uF,20%,50V,BP,TP,3x5.2,5mm	
C618	2401-000360	C-AL;100uF,20%,50V,GP,TP,8x11.5,5	
C619	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C620	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C621	2401-000118	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C622	2203-001137	C-CERAMIC,CHIP;68nF,+80-20%,50V,Y5V,TP,2	
C623	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C624	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	BACK-UP (1HR) ONLY
C625	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	BACK-UP (1HR) ONLY
C626	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C627	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C629	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
C633	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C634	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C635	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
C636	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
C637	2203-000938	C-CERAMIC,CHIP;0.47nF,5%,50V,NP0,TP,2012	
C638	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7.5	
C639	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,2012	
C640	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	

MEMO

5. Schematic Diagrams

◆ Block Identification of Main PCB ---------- 5-2

5-1 S.M.P.S. ---------- 5-3

5-2 Power Drive ---------- 5-4

5-3 System Control/Servo/Display ---------- 5-5

5-4 Audio/Video ---------- 5-6

5-5 Hi-Fi ---------- 5-7

5-6 TM ---------- 5-8

5-7 SECAM ---------- 5-9

5-8 A2/NICAM ---------- 5-10

5-9 OSD/VPS/PDC ---------- 5-11

5-10 Input-Output ---------- 5-12

5-11 Front A/V ---------- 5-13

Note

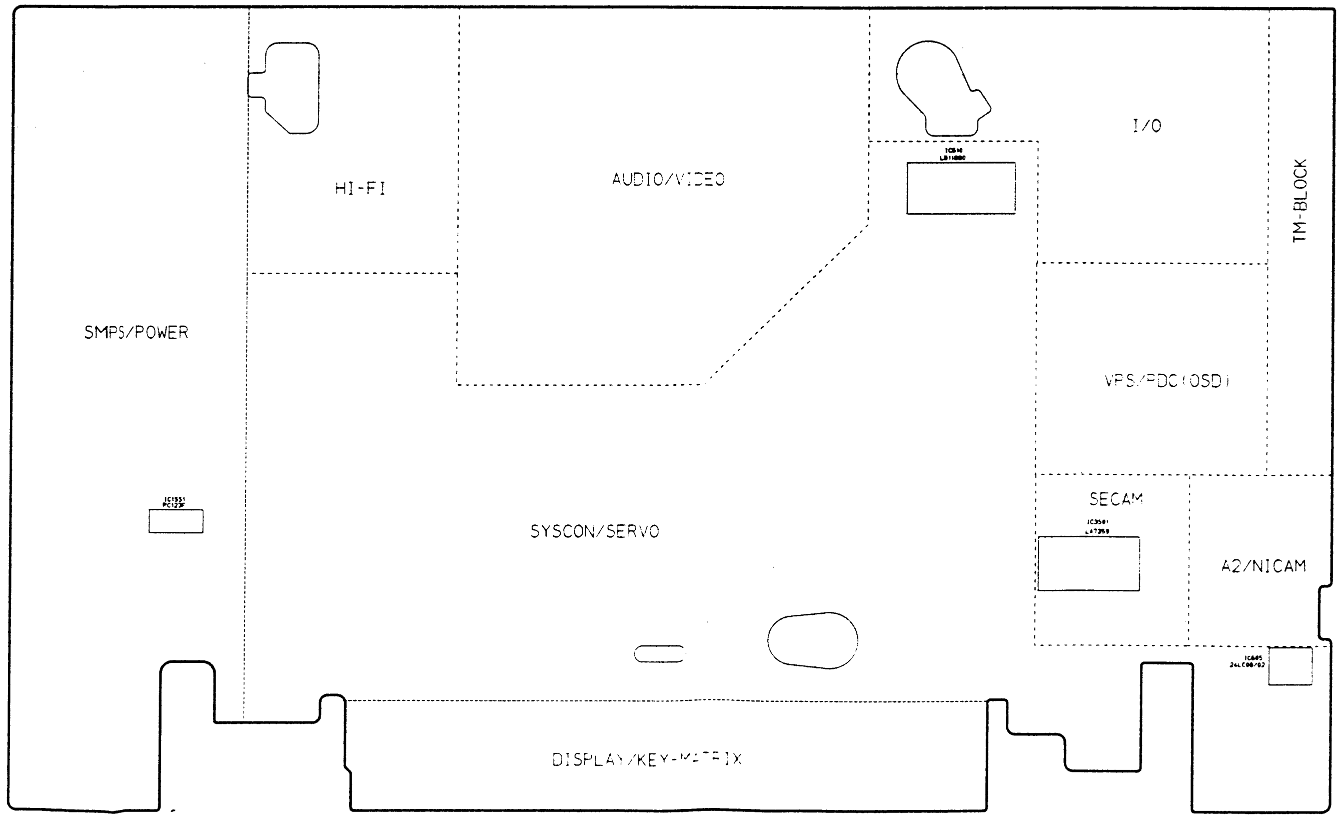
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

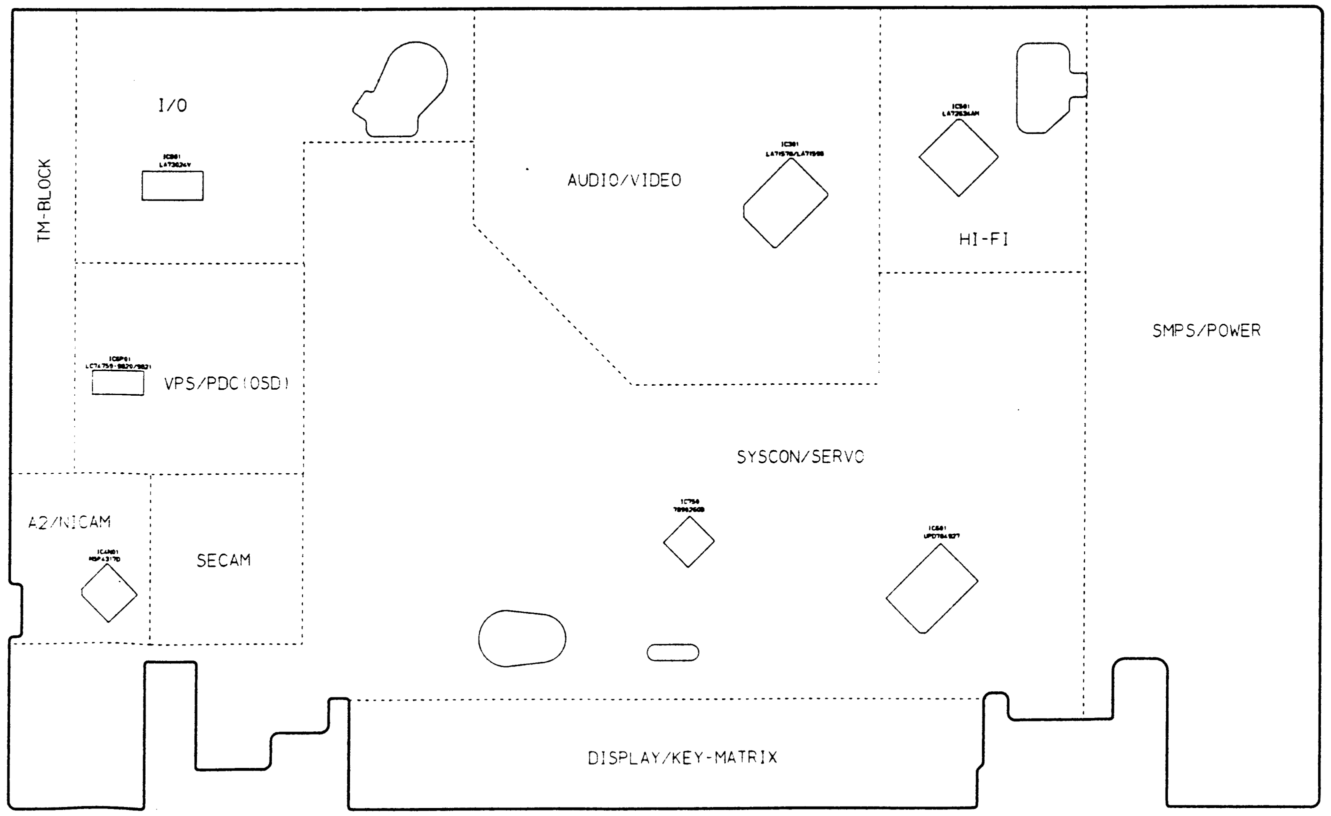
Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.

◆ Block Identification of Main PCB


HI-FI
AUDIO/VIDEO
I/O
TM-BLOCK
SMPS/POWER
VPS/PDC(OSD)
SECAM
A2/NICAM
SYSCON/SERVO
DISPLAY/KEY-MATRIX

Component Side


I/O
TM-BLOCK
AUDIO/VIDEO
HI-FI
SMPS/POWER
VPS/PDC(OSD)
SYSCON/SERVO
A2/NICAM
SECAM
DISPLAY/KEY-MATRIX

Conductor Side

Note

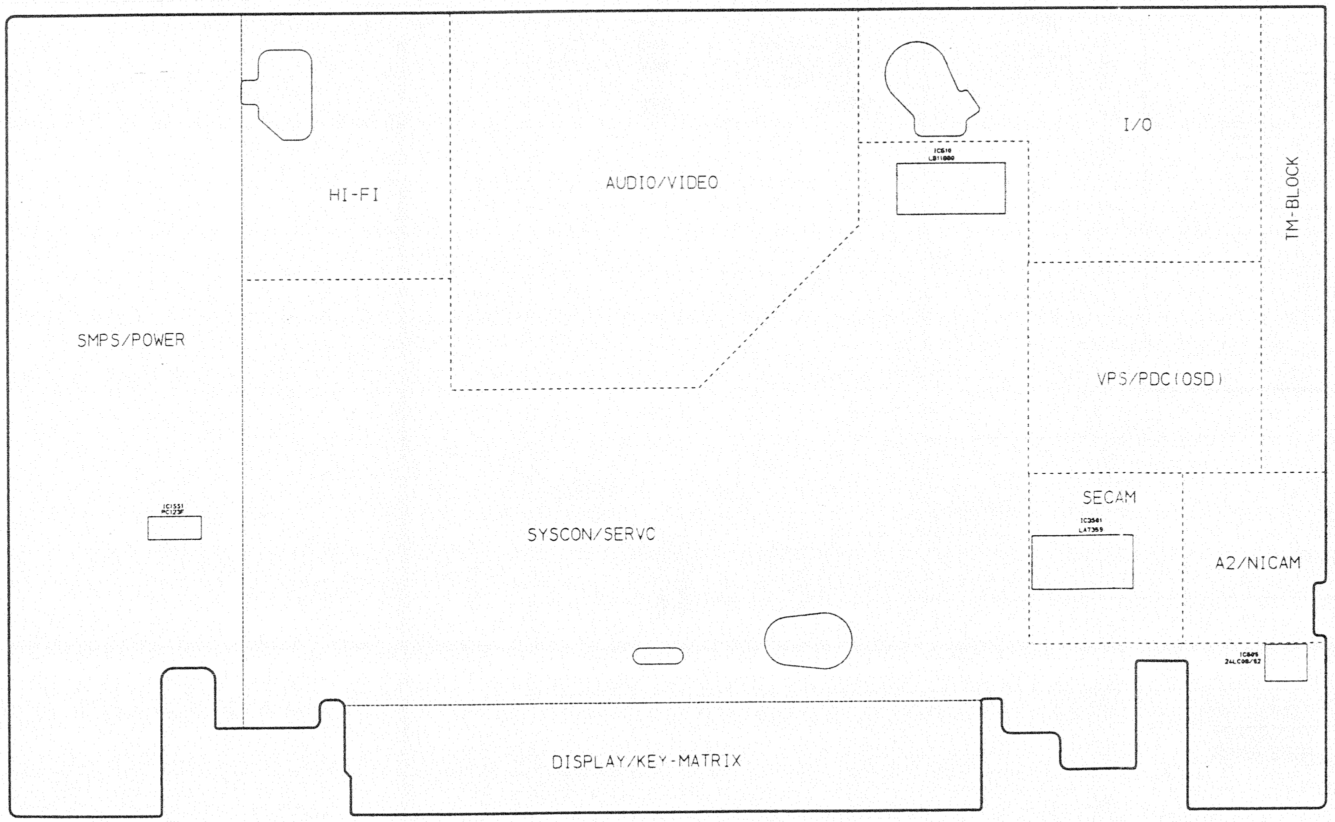
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

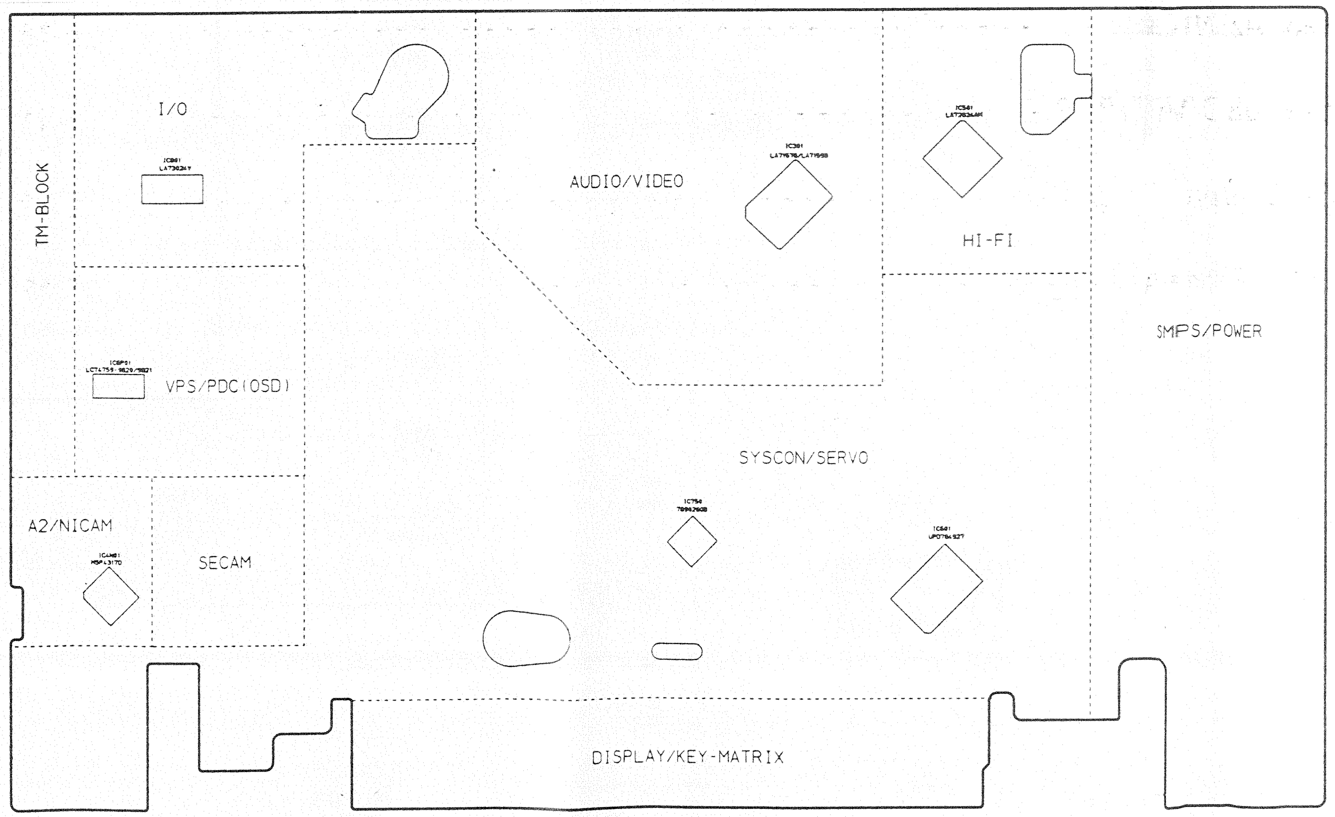
Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.

◆ Block Identification of Main PCB

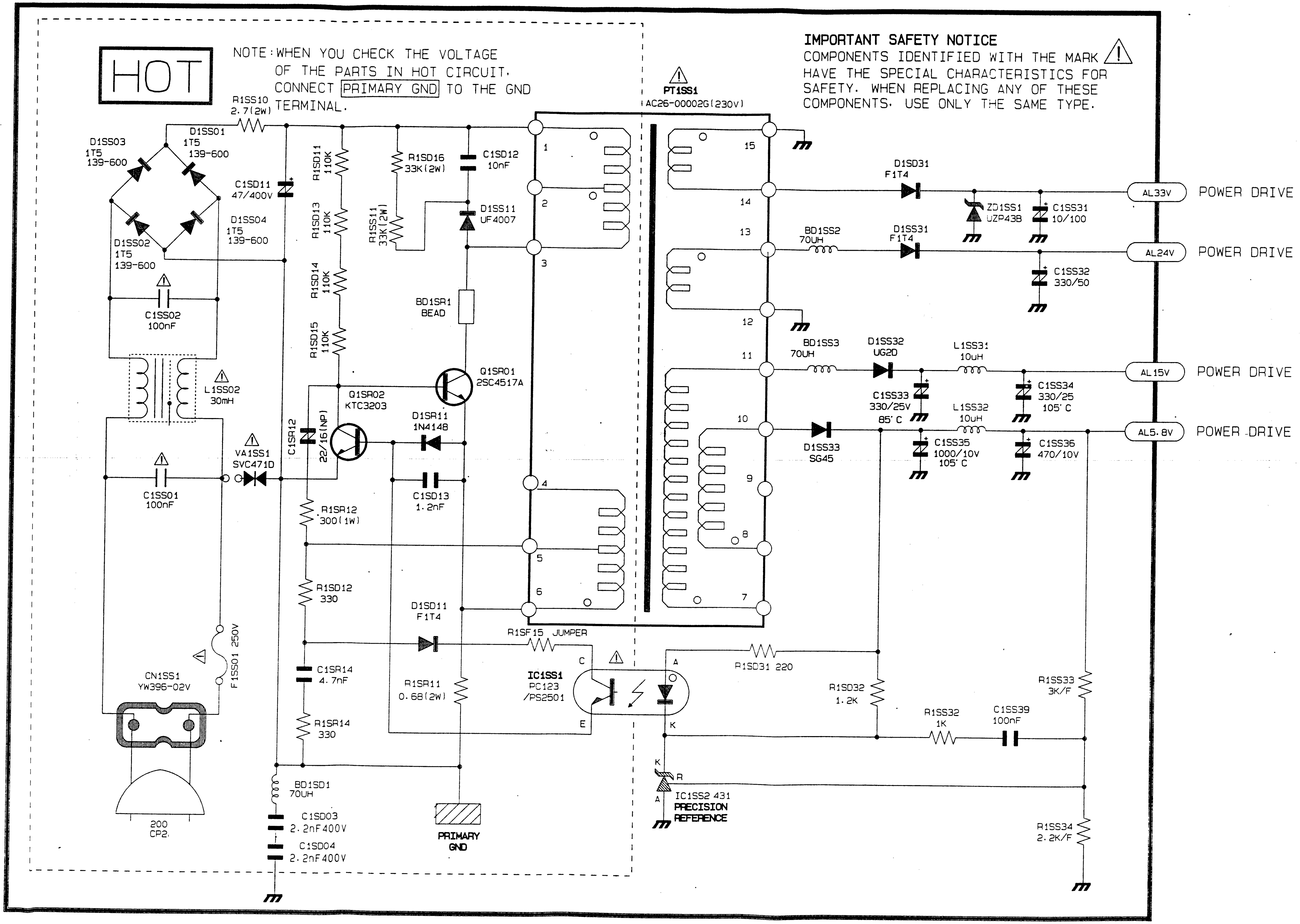

HI-FI
AUDIO/VIDEO
I/O
TM-BLOCK
SMPS/POWER
VPS/PDC(OSD)
SECAM
SYSCON/SERVC
A2/NICAM
DISPLAY/KEY-MATRIX

Component Side


I/O
TM-BLOCK
AUDIO/VIDEO
HI-FI
SMPS/POWER
VPS/PDC(OSD)
SYSCON/SERVO
A2/NICAM
SECAM
DISPLAY/KEY-MATRIX

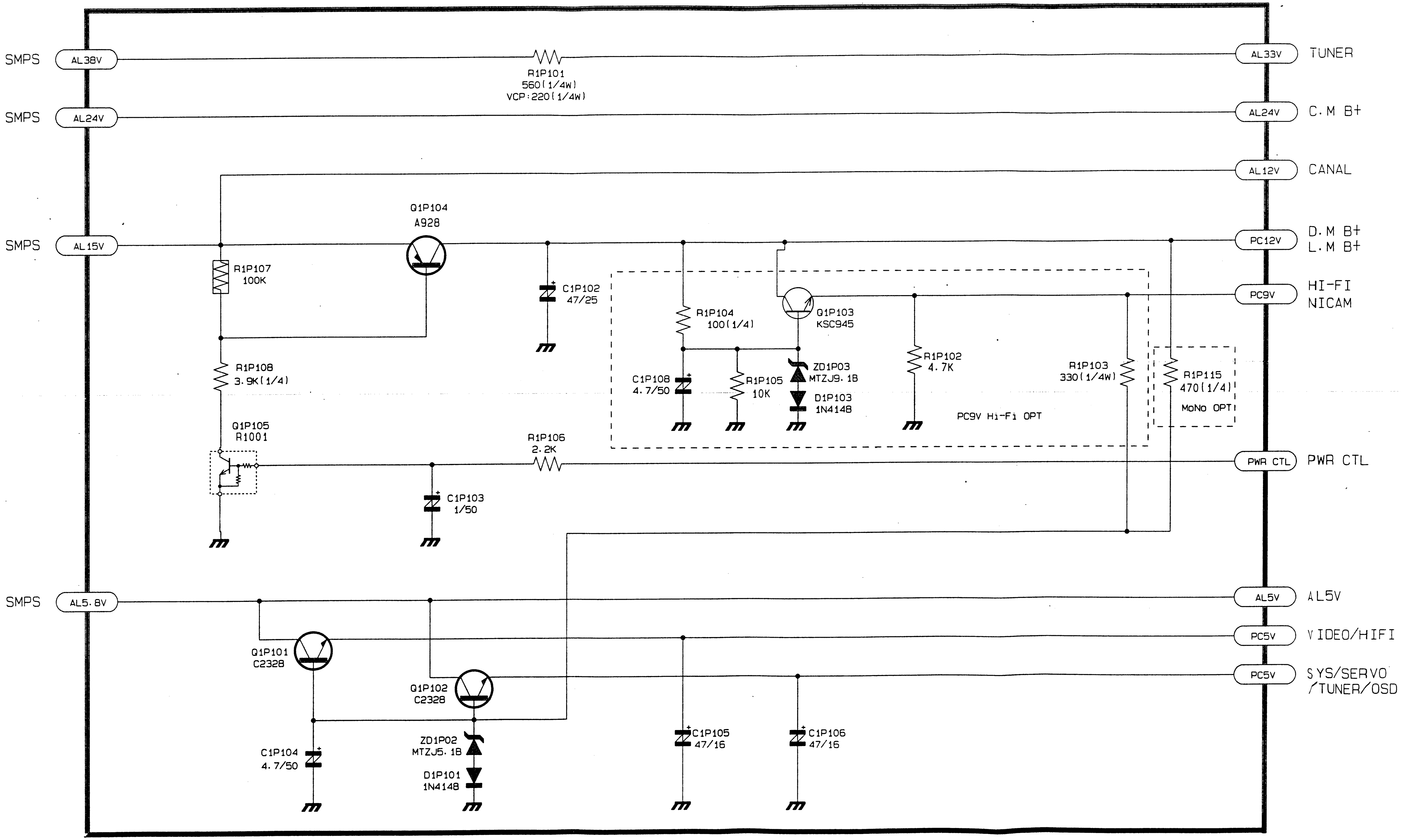
Conductor Side

5-1 S.M.P.S.

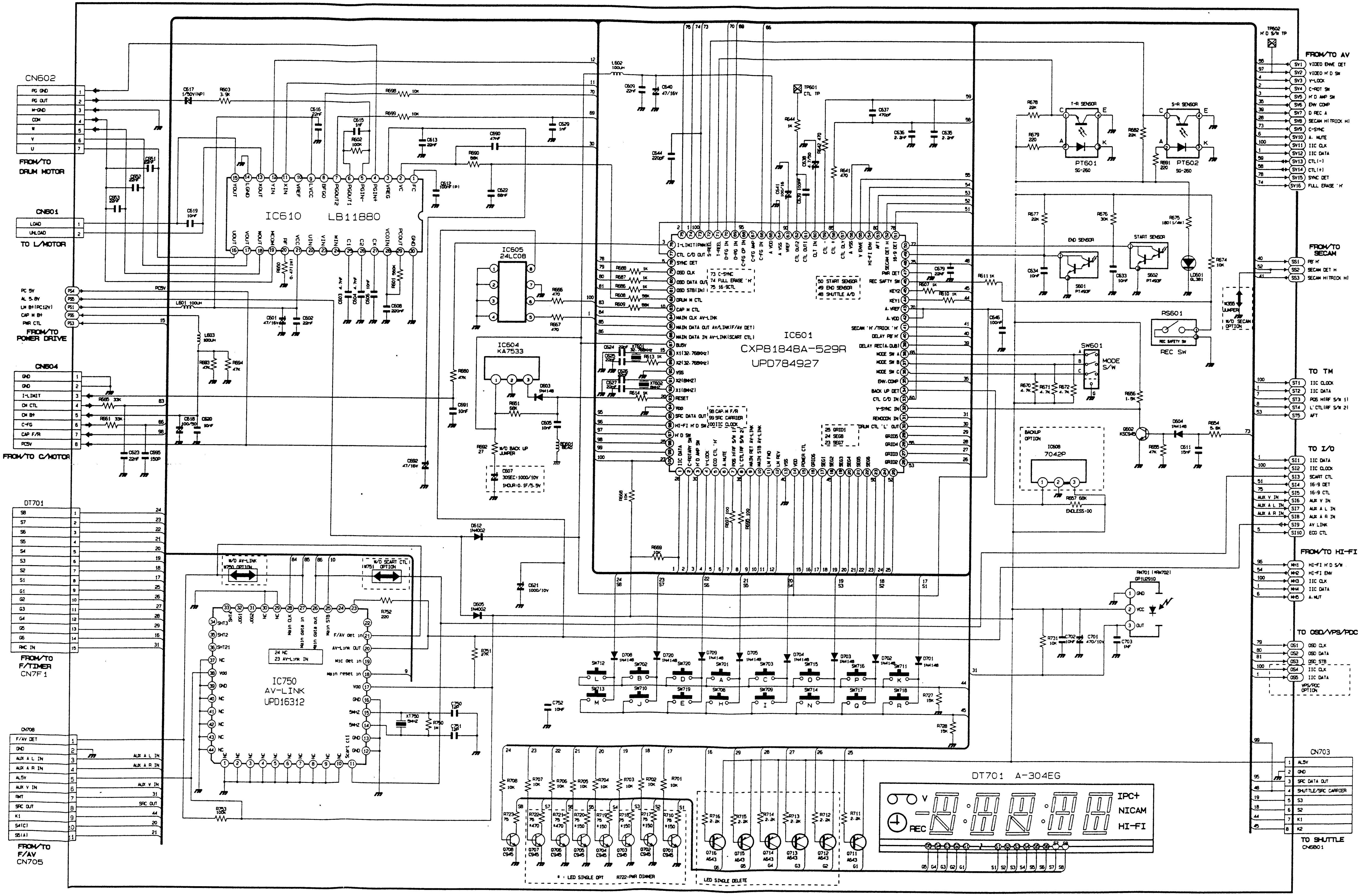

HOT
NOTE : WHEN YOU CHECK THE VOLTAGE OF THE PARTS IN HOT CIRCUIT. CONNECT PRIMARY GND TO THE GND TERMINAL.
IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS. USE ONLY THE SAME TYPE.
PT1SS1
AC26-00002G(230V)
R1SS10
2.7(2W)
D1SS01
1T5
139-600
D1SS03
1T5
139-600
D1SS02
1T5
139-600
D1SS04
1T5
139-600
C1SD11
47/400V
C1SS02
100nF
L1SS02
30mH
C1SS01
100nF
VA1SS1
SVC471D
CN1SS1
YW396-02V
F1SS01 250V
200
CP2.
R1SD11
110K
R1SD13
110K
R1SD14
110K
R1SD15
110K
R1SD16
33K(2W)
R1SS11
33K(2W)
C1SD12
10nF
D1SS11
UF4007
BD1SR1
BEAD
Q1SR01
2SC4517A
Q1SR02
KTC3203
C1SR12
22/16(NP)
D1SR11
1N4148
C1SD13
1.2nF
R1SR12
300(1W)
R1SD12
330
D1SD11
F1T4
R1SF15 JUMPER
C1SR14
4.7nF
R1SR11
0.68(2W)
R1SR14
330
BD1SD1
70UH
C1SD03
2.2nF400V
C1SD04
2.2nF400V
PRIMARY
GND
IC1SS1
PC123
/PS2501
C
E
A
K
R
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
D1SD31
F1T4
ZD1SS1
UZP43B
C1SS31
10/100
AL33V
POWER DRIVE
BD1SS2
70UH
D1SS31
F1T4
AL24V
POWER DRIVE
C1SS32
330/50
BD1SS3
70UH
D1SS32
UG2D
L1SS31
10uH
C1SS33
330/25V
85°C
L1SS32
10uH
C1SS34
330/25
105°C
AL15V
POWER DRIVE
D1SS33
SG45
C1SS35
1000/10V
105°C
C1SS36
470/10V
AL5.8V
POWER DRIVE
R1SD31 220
R1SD32
1.2K
R1SS32
1K
C1SS39
100nF
R1SS33
3K/F
IC1SS2 431
PRECISION
REFERENCE
R1SS34
2.2K/F

]

5-2 Power Drive

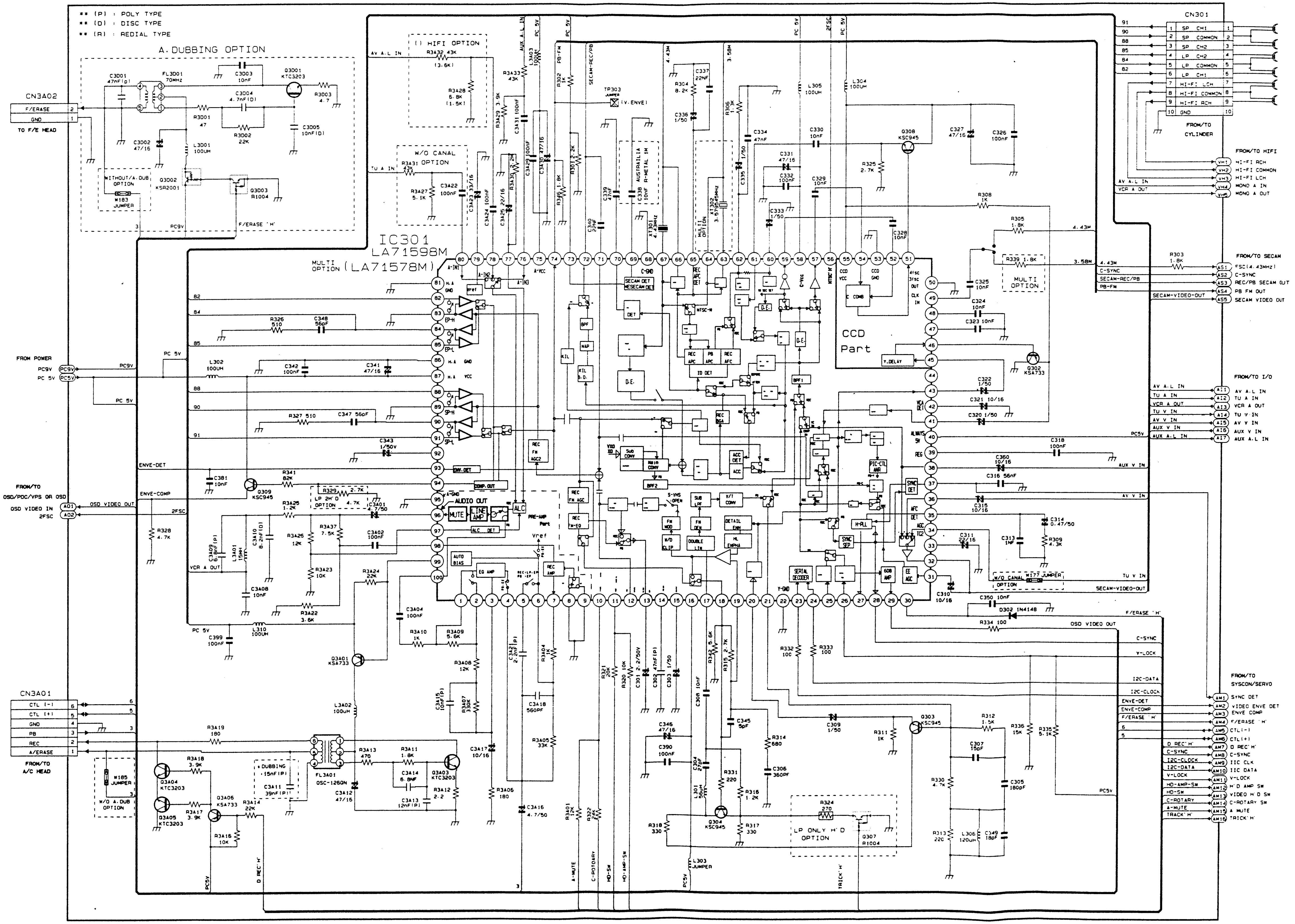

SMPS
AL38V
R1P101
560(1/4W)
VCP:220(1/4W)
AL33V
TUNER
SMPS
AL24V
AL24V
C.M B+
AL12V
CANAL
Q1P104
A928
SMPS
AL15V
PC12V
D.M B+
L.M B+
R1P107
100K
C1P102
47/25
R1P104
100(1/4)
Q1P103
KSC945
PC9V
HI-FI
NICAM
R1P108
3.9K(1/4)
C1P108
4.7/50
R1P105
10K
ZD1P03
MTZJ9.1B
D1P103
1N4148
R1P102
4.7K
PC9V Hi-Fi OPT
R1P103
330(1/4W)
R1P115
470(1/4)
MONO OPT
Q1P105
R1001
R1P106
2.2K
PWR CTL
PWR CTL
C1P103
1/50
SMPS
AL5.8V
AL5V
AL5V
Q1P101
C2328
PC5V
VIDEO/HIFI
Q1P102
C2328
PC5V
SYS/SERVO
/TUNER/OSD
ZD1P02
MTZJ5.1B
D1P101
1N4148
C1P104
4.7/50
C1P105
47/16
C1P106
47/16

5-3 System Control/Servo/Display

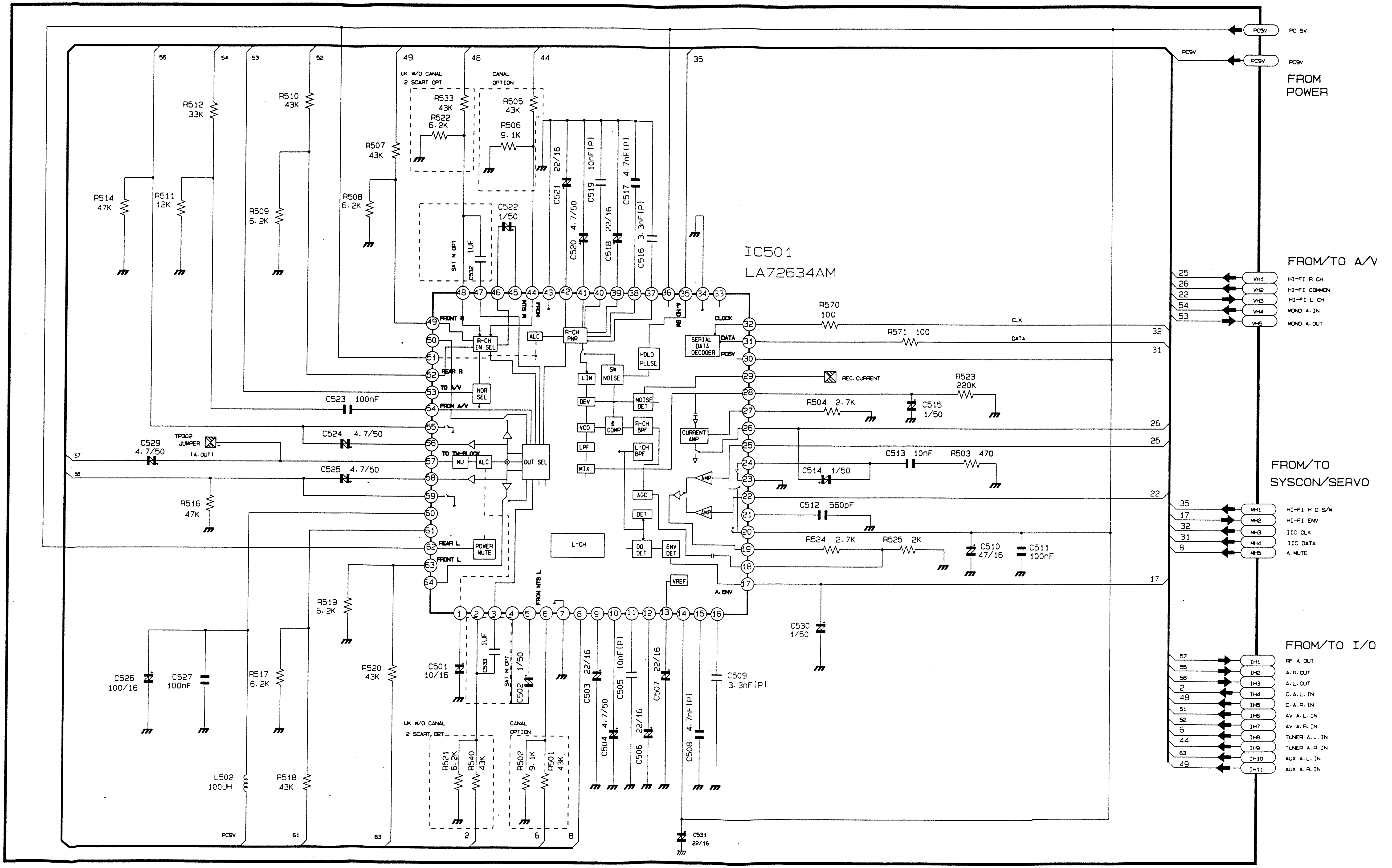


CN602
PG GND
PG OUT
M-GND
COM
W
V
U
FROM/TO DRUM MOTOR
CN601
LOAD
UNLOAD
TO L/MOTOR
PC 5V
AL 5.8V
LM B+(PC12V)
CAP M B+
PWR CTL
FROM/TO POWER DRIVE
CN604
GND
I-LIMIT
CH CTL
CH B+
C-FG
CAP F/R
PC5V
FROM/TO C/MOTOR
DT701
FROM/TO F/TIMER CN7F1
CN708
F/AV DET
GND
AUX A L IN
AUX A R IN
AL5V
AUX V IN
RMT
SRC OUT
K1
S4(C)
S5(A)
FROM/TO F/AV CN705
IC610 LB11880
IC605 24LC08
IC604 KA7533
W/O BACK UP JUMPER
C607 30SEC:1000/10V 1HOUR:0.1F/5.5V
IC601
CXP81848A-529R
UPD784927
IC750 AV-LINK UPD16312
W/O AV-LINK W750 OPTION
W/O SCART CTL W751 OPTION
TP601 CTL TP
T-R SENSOR
S-R SENSOR
PT601 SG-260
PT602 SG-260
END SENSOR
START SENSOR
S601 PT493F
S602 PT493F
LD601 GL381
RS601
REC SW
SW601
MODE S/W
W/O SECAM JUMPER OPTION
BACKUP OPTION
IC608 7042P
ENDLESS:00
Q502 KSC945
RM701 (RM702) GP1U2910
FROM/TO AV
SV1 VIDEO ENVE DET
SV2 VIDEO H'D SW
SV3 V-LOCK
SV4 C-ROT SW
SV5 H'D AMP SW
SV6 ENV COMP
SV7 D REC A
SV8 SECAM HI TRICK HI
SV9 C-SYNC
SV10 A. MUTE
SV11 IIC CLK
SV12 IIC DATA
SV13 CTL(-)
SV14 CTL(+)
SV15 SYNC DET
SV16 FULL ERASE 'H'
FROM/TO SECAM
SS1 PB'H'
SS2 SECAM DET H
SS3 SECAM HI TRICK HI
TO TM
ST1 IIC CLOCK
ST2 IIC DATA
ST3 POS HIRF S/W 1)
ST4 L'CTL(RF S/W 2)
ST5 AFT
TO I/O
SI1 IIC DATA
SI2 IIC CLOCK
SI3 SCART CTL
SI4 16:9 DET
SI5 16:9 CTL
SI6 AUX V IN
SI7 AUX A L IN
SI8 AUX A R IN
SI9 AV LINK
SI10 ECO CTL
FROM/TO HI-FI
MH1 HI-FI H'D S/W
MH2 HI-FI ENV
MH3 IIC CLK
MH4 IIC DATA
MH5 A.MUT
TO OSD/VPS/PDC
OS1 OSD CLK
OS2 OSD DATA
OS3 OSD STB
OS4 IIC CLK
OS5 IIC DATA
VPS/PDC OPTION
CN703
A5V
GND
SRC DATA OUT
SHUTTLE/SRC CARRIER
S3
S2
K1
K2
TO SHUTTLE CN6801
DT701 A-304EG
IPC+
NICAM
HI-FI
REC
* : LED SINGLE OPT R722:PWR DIMMER
LED SINGLE DELETE

5-4 Audio/Video

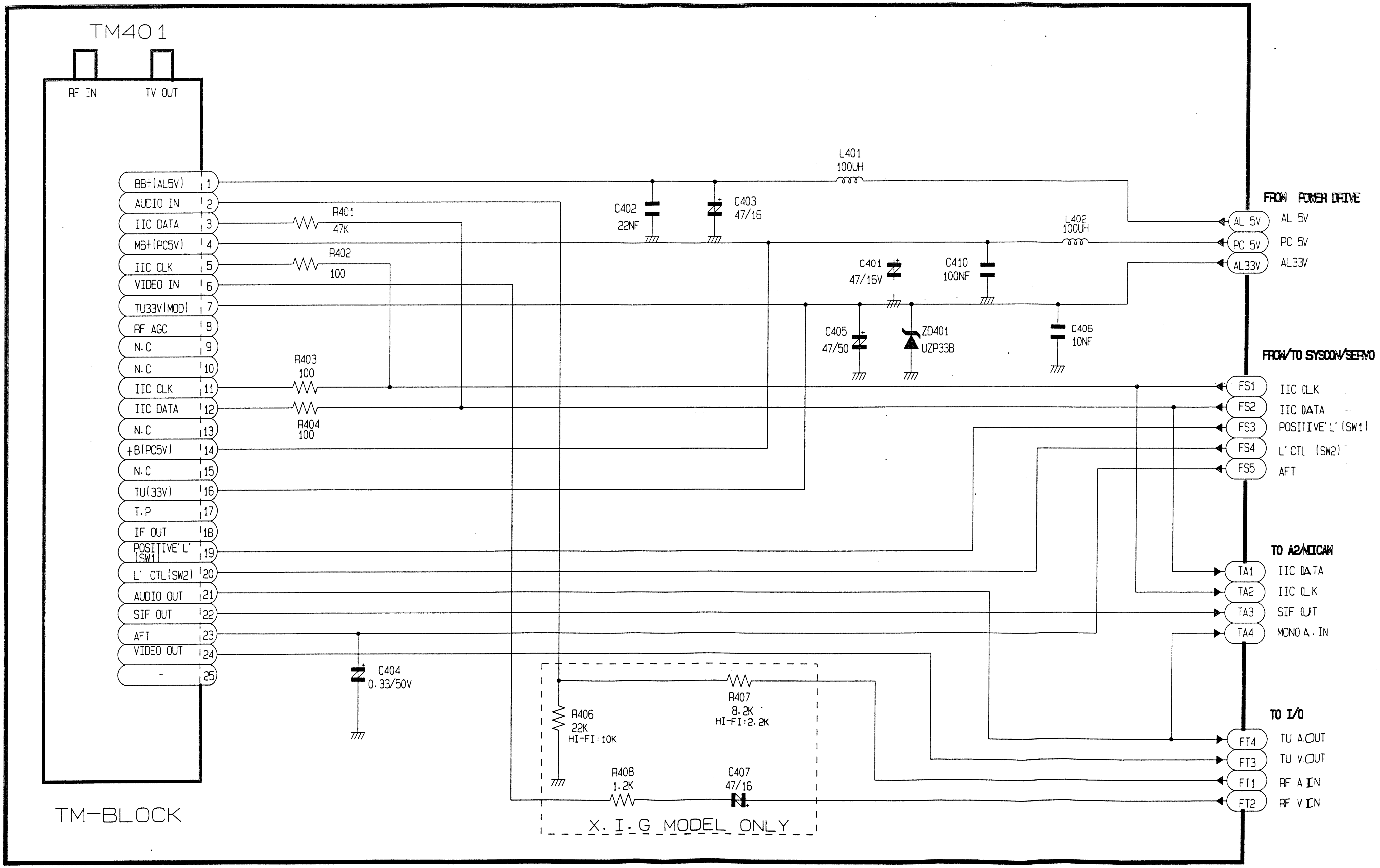

** (P) : POLY TYPE
** (D) : DISC TYPE
** (R) : REDIAL TYPE
A. DUBBING OPTION
CN3A02
F/ERASE
GND
TO F/E HEAD
C3001 47nF(D)
FL3001 70MHz
C3003 10nF
C3004 4.7nF(D)
Q3001 KTC3203
R3003 4.7
R3001 47
R3002 22K
C3005 10nF(D)
C3002 47/16
L3001 100uH
WITHOUT/A.DUB OPTION
W183 JUMPER
Q3002 KSR2001
Q3003 RN1004
F/ERASE 'H'
PC9V
( ) HIFI OPTION
AV A.L IN
R3432 43K (3.6K)
R3428 6.8K (1.5K)
W/O CANAL
R3431 OPTION 43K
TU A IN
R3427 5.1K
C3A22 100nF
R3433 43K
TP303 JUMPER
(V.ENVE)
IC301
LA71598M
MULTI OPTION (LA71578M)
CCD Part
Y.DELAY
AUDIO OUT
MUTE
LINE AMP
ALC
ALC DET
PRE-AMP Part
AUTO BIAS
EQ AMP
REC AMP
ENV-DET
COMP-OUT
SERIAL DECODER
MULTI OPTION
W/O CANAL W177 JUMPER OPTION
LP ONLY H'D OPTION
LP 2H'D OPTION
DUBBING (15nF(P))
W/O A.DUB OPTION
W185 JUMPER
CN301
1 SP CH1
2 SP COMMON
3 SP CH2
4 LP CH2
5 LP COMMON
6 LP CH1
7 HI-FI LCH
8 HI-FI COMMON
9 HI-FI RCH
10 GND
FROM/TO CYLINDER
FROM/TO HIFI
HI-FI RCH
HI-FI COMMON
HI-FI LCH
MONO A IN
MONO A OUT
FROM/TO SECAM
FSC(4.43MHz)
C-SYNC
REC/PB SECAM OUT
PB FM OUT
SECAM VIDEO OUT
FROM/TO I/O
AV A.L IN
TU A IN
VCR A OUT
TU V IN
AV V IN
AUX V IN
AUX A.L IN
FROM POWER
PC9V
PC 5V
FROM/TO OSD/PDC/VPS OR OSD
OSD VIDEO IN
2FSC
CN3A01
CTL (-)
CTL (+)
GND
PB
REC
A/ERASE
FROM/TO A/C HEAD
FROM/TO SYSCON/SERVO
SYNC DET
VIDEO ENVE DET
ENVE COMP
F/ERASE 'H'
CTL(-)
CTL(+)
D REC'H'
C-SYNC
IIC CLK
IIC DATA
V-LOCK
H'D AMP SW
VIDEO H'D SW
C-ROTARY SW
A MUTE
TRICK'H'
Q3A01 KSA733
Q3A03 KTC3203
Q3A04 KTC3203
Q3A05 KTC3203
Q3A06 KSA733
FL3A01 OSC-1260N
Q302 KSA733
Q303 KSC945
Q304 KSC945
Q307 RN1004
Q308 KSC945
Q309 KSC945
D302 1N4148
L303 JUMPER
XT301 4.43MHz
XT302 3.579545MHz
A-MUTE
C-ROTARY
HD-SW
HD-AMP-SW
PC5V
TRICK'H'
D REC'H'

5-5 Hi-Fi

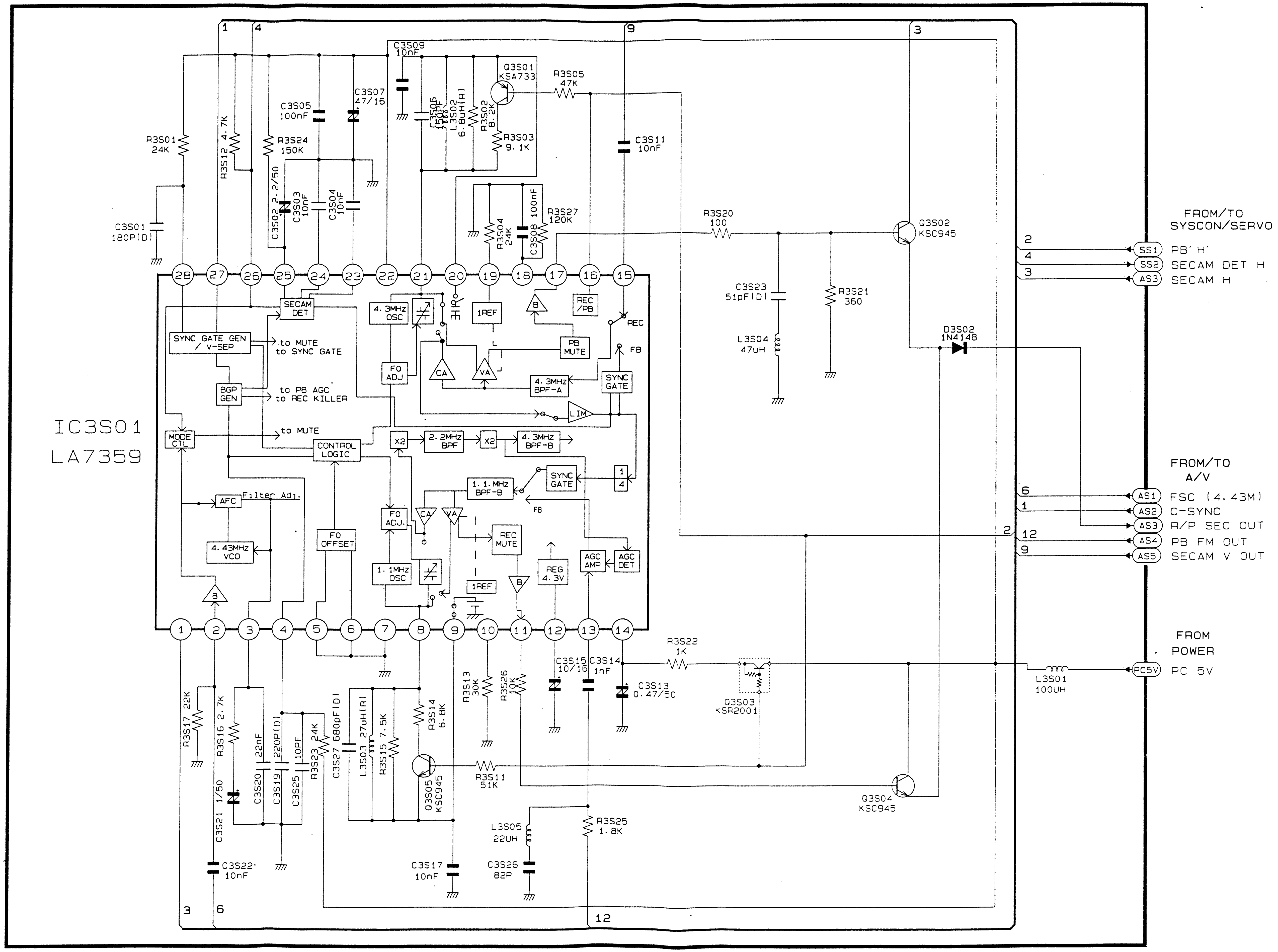


IC501
LA72634AM
PC5V
PC 5V
PC9V
FROM POWER
FROM/TO A/V
VH1 HI-FI R CH
VH2 HI-FI COMMON
VH3 HI-FI L CH
VH4 MONO A. IN
VH5 MONO A. OUT
FROM/TO SYSCON/SERVO
MH1 HI-FI H'D S/W
MH2 HI-FI ENV
MH3 IIC CLK
MH4 IIC DATA
MH5 A. MUTE
FROM/TO I/O
IH1 RF A OUT
IH2 A. R. OUT
IH3 A. L. OUT
IH4 C. A. L. IN
IH5 C. A. R. IN
IH6 AV A. L. IN
IH7 AV A. R. IN
IH8 TUNER A. L. IN
IH9 TUNER A. R. IN
IH10 AUX A. L. IN
IH11 AUX A. R. IN
R512 33K
R510 43K
R514 47K
R511 12K
R509 6.2K
R508 6.2K
R507 43K
UK W/O CANAL 2 SCART OPT
CANAL OPTION
R533 43K
R522 6.2K
R505 43K
R506 9.1K
C522 1/50
SAT M OPT
1UF
C532
C521 22/16
C520 4.7/50
C519 10nF(P)
C518 22/16
C517 4.7nF(P)
C516 3.3nF(P)
FRONT R
R-CH IN SEL
REAR R
TO A/V
FROM A/V
NOR SEL
MTS R
ALC
R-CH PNR
LIM
SW NOISE
HOLD PULSE
SERIAL DATA DECODER
PC5V
CLOCK
DATA
A. CH NO
DEV
NOISE DET
VCO
θ COMP
R-CH BPF
LPF
L-CH BPF
MIX
CURRENT AMP
AMP
AGC
DET
DO DET
ENV DET
VREF
A. ENV
L-CH
TO TM-BLOCK
MU
ALC
OUT SEL
REAR L
FRONT L
POWER MUTE
FROM MTS L
C523 100nF
C524 4.7/50
C525 4.7/50
C529 4.7/50
TP302 JUMPER
(A. OUT)
R516 47K
R570 100
R571 100
CLK
DATA
REC. CURRENT
R523 220K
R504 2.7K
C515 1/50
C513 10nF
R503 470
C514 1/50
C512 560pF
R524 2.7K
R525 2K
C510 47/16
C511 100nF
C530 1/50
R519 6.2K
C526 100/16
C527 100nF
R517 6.2K
R520 43K
C501 10/16
C533
1UF
C502 1/50
C503 22/16
C504 4.7/50
C505 10nF(P)
C506 22/16
C507 22/16
C508 4.7nF(P)
C509 3.3nF(P)
R521 6.2K
R540 43K
R502 9.1K
R501 43K
L502 100UH
R518 43K
C531 22/16

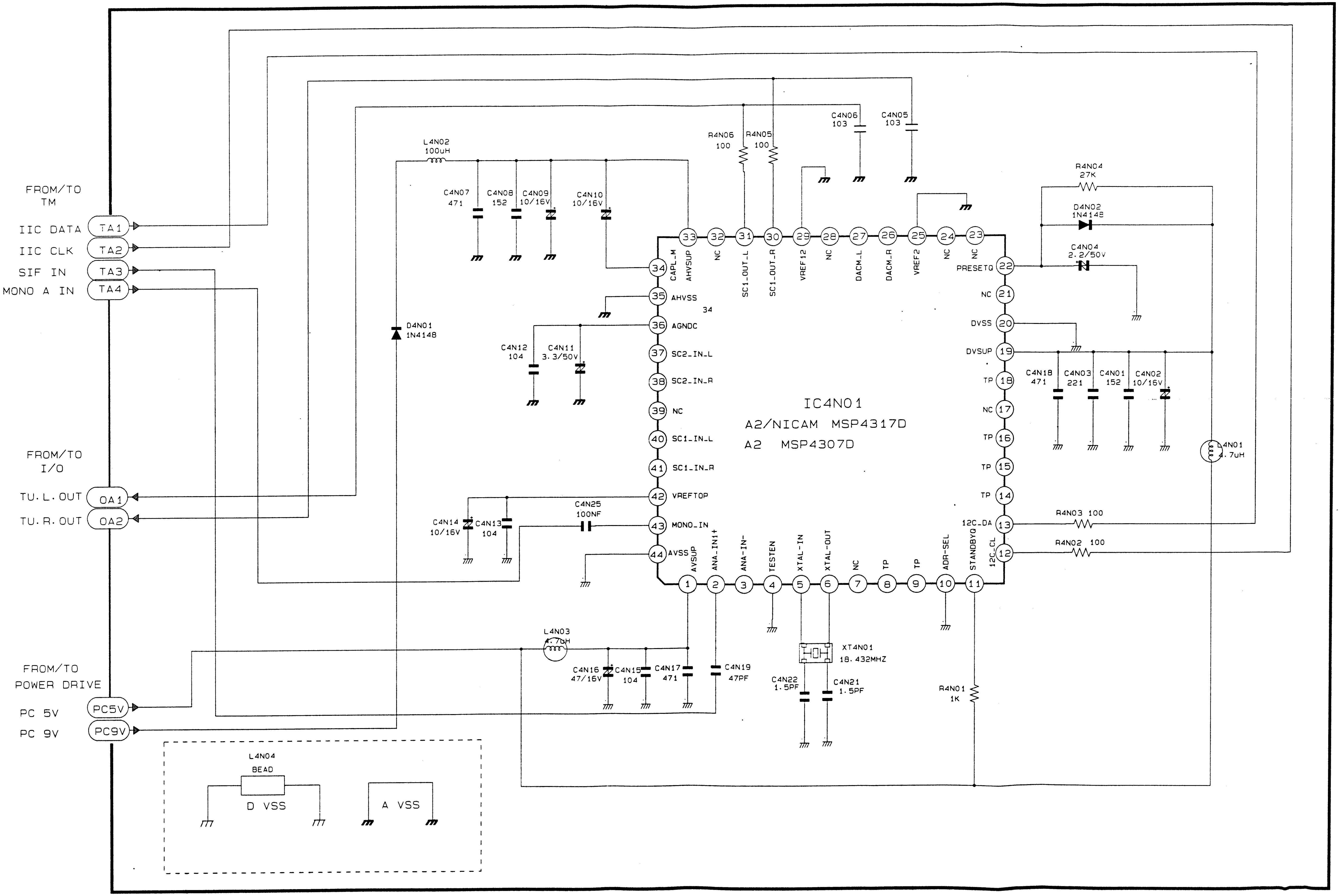
5-6 TM


TM401
RF IN
TV OUT
BB+(AL5V) 1
AUDIO IN 2
IIC DATA 3
MB+(PC5V) 4
IIC CLK 5
VIDEO IN 6
TU33V(MOD) 7
RF AGC 8
N.C 9
N.C 10
IIC CLK 11
IIC DATA 12
N.C 13
+B(PC5V) 14
N.C 15
TU(33V) 16
T.P 17
IF OUT 18
POSITIVE'L' (SW1) 19
L' CTL(SW2) 20
AUDIO OUT 21
SIF OUT 22
AFT 23
VIDEO OUT 24
- 25
TM-BLOCK
L401 100UH
L402 100UH
R401 47K
R402 100
R403 100
R404 100
C402 22NF
C403 47/16
C401 47/16V
C410 100NF
C405 47/50
ZD401 UZP33B
C406 10NF
C404 0.33/50V
R406 22K HI-FI:10K
R407 8.2K HI-FI:2.2K
R408 1.2K
C407 47/16
X.I.G MODEL ONLY
FROM POWER DRIVE
AL 5V
PC 5V
AL33V
AL 5V
PC 5V
AL33V
FROM/TO SYSCON/SERVO
FS1 IIC CLK
FS2 IIC DATA
FS3 POSITIVE'L' (SW1)
FS4 L' CTL (SW2)
FS5 AFT
TO A2/NICAM
TA1 IIC DATA
TA2 IIC CLK
TA3 SIF OUT
TA4 MONO A.IN
TO I/O
FT4 TU A.OUT
FT3 TU V.OUT
FT1 RF A.IN
FT2 RF V.IN

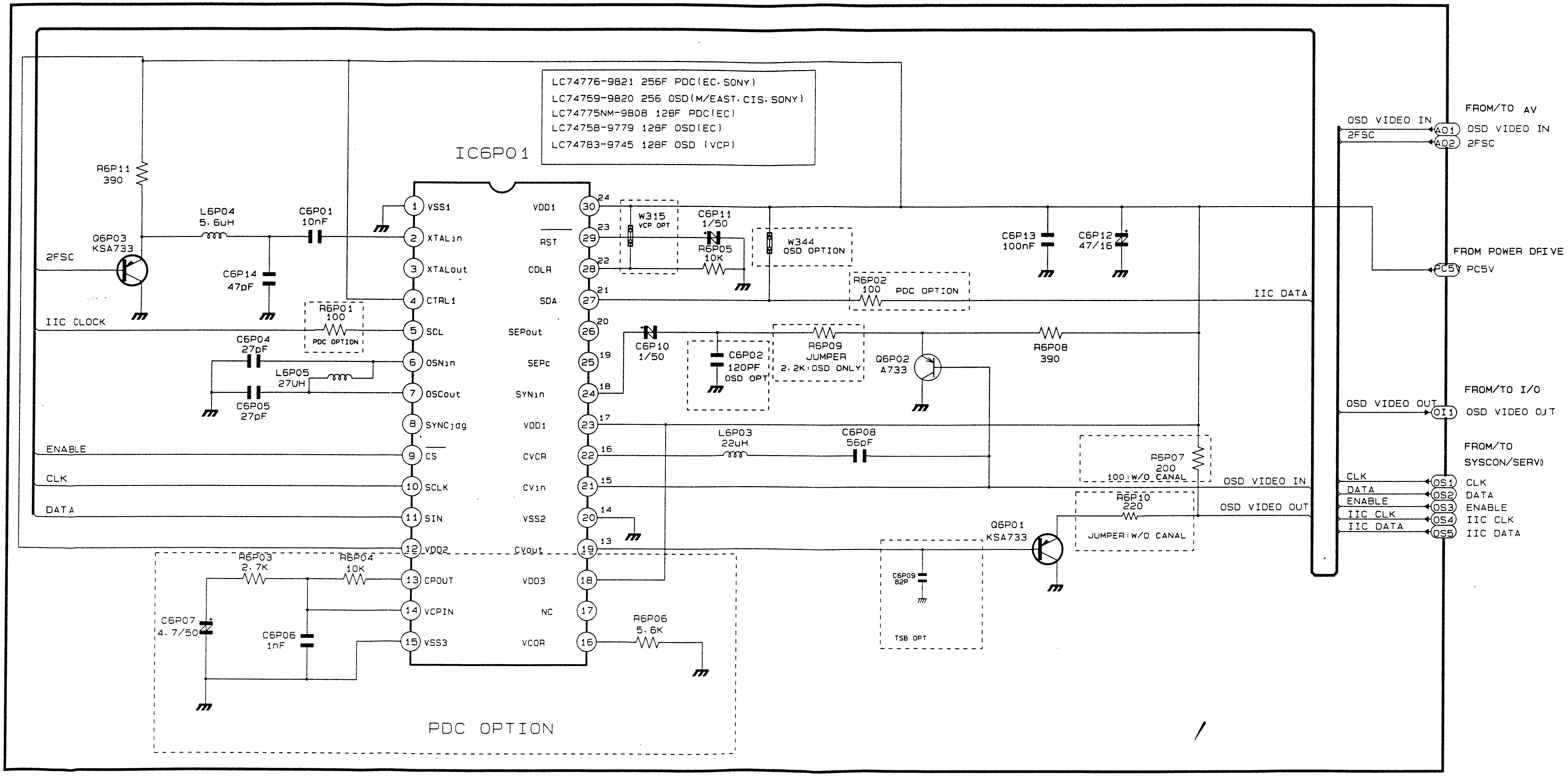
5-7 SECAM


IC3S01
LA7359
FROM/TO
SYSCON/SERVO
SS1 PB' H'
SS2 SECAM DET H
AS3 SECAM H
FROM/TO
A/V
AS1 FSC (4.43M)
AS2 C-SYNC
AS3 R/P SEC OUT
AS4 PB FM OUT
AS5 SECAM V OUT
FROM
POWER
PC5V PC 5V
SECAM DET
SYNC GATE GEN / V-SEP
to MUTE
to SYNC GATE
BGP GEN
to PB AGC
to REC KILLER
to MUTE
MODE CTL
CONTROL LOGIC
AFC
Filter Adj.
4.43MHz VCO
FO OFFSET
4.3MHz OSC
FO ADJ
1REF
REC /PB
PB MUTE
REC
FB
SYNC GATE
4.3MHz BPF-A
CA
VA
LIM
X2
2.2MHz BPF
X2
4.3MHz BPF-B
1.1MHz BPF-B
SYNC GATE
FB
FO ADJ.
CA
VA
REC MUTE
1.1MHz OSC
1REF
REG 4.3V
AGC AMP
AGC DET
Q3S01 KSA733
R3S05 47K
C3S09 10nF
C3S07 47/16
C3S05 100nF
C3S06 150PF
L3S02 6.8UH(R)
R3S02 8.2K
R3S03 9.1K
C3S11 10nF
R3S01 24K
R3S12 4.7K
R3S24 150K
C3S01 180P(D)
C3S02 2.2/50
C3S03 10nF
C3S04 10nF
R3S04 24K
C3S08 100nF
R3S27 120K
R3S20 100
Q3S02 KSC945
C3S23 51pF(D)
R3S21 360
L3S04 47uH
D3S02 1N4148
R3S22 1K
Q3S03 KSR2001
L3S01 100UH
C3S15 10/16
C3S14 1nF
C3S13 0.47/50
R3S17 22K
R3S16 2.7K
C3S21 1/50
C3S22 10nF
C3S20 22nF
C3S19 220P(D)
C3S25 10PF
R3S23 24K
C3S27 680pF(D)
L3S03 27uH(R)
R3S15 7.5K
R3S14 6.8K
Q3S05 KSC945
R3S13 30K
R3S26 10K
R3S11 51K
Q3S04 KSC945
L3S05 22UH
R3S25 1.8K
C3S17 10nF
C3S26 82P

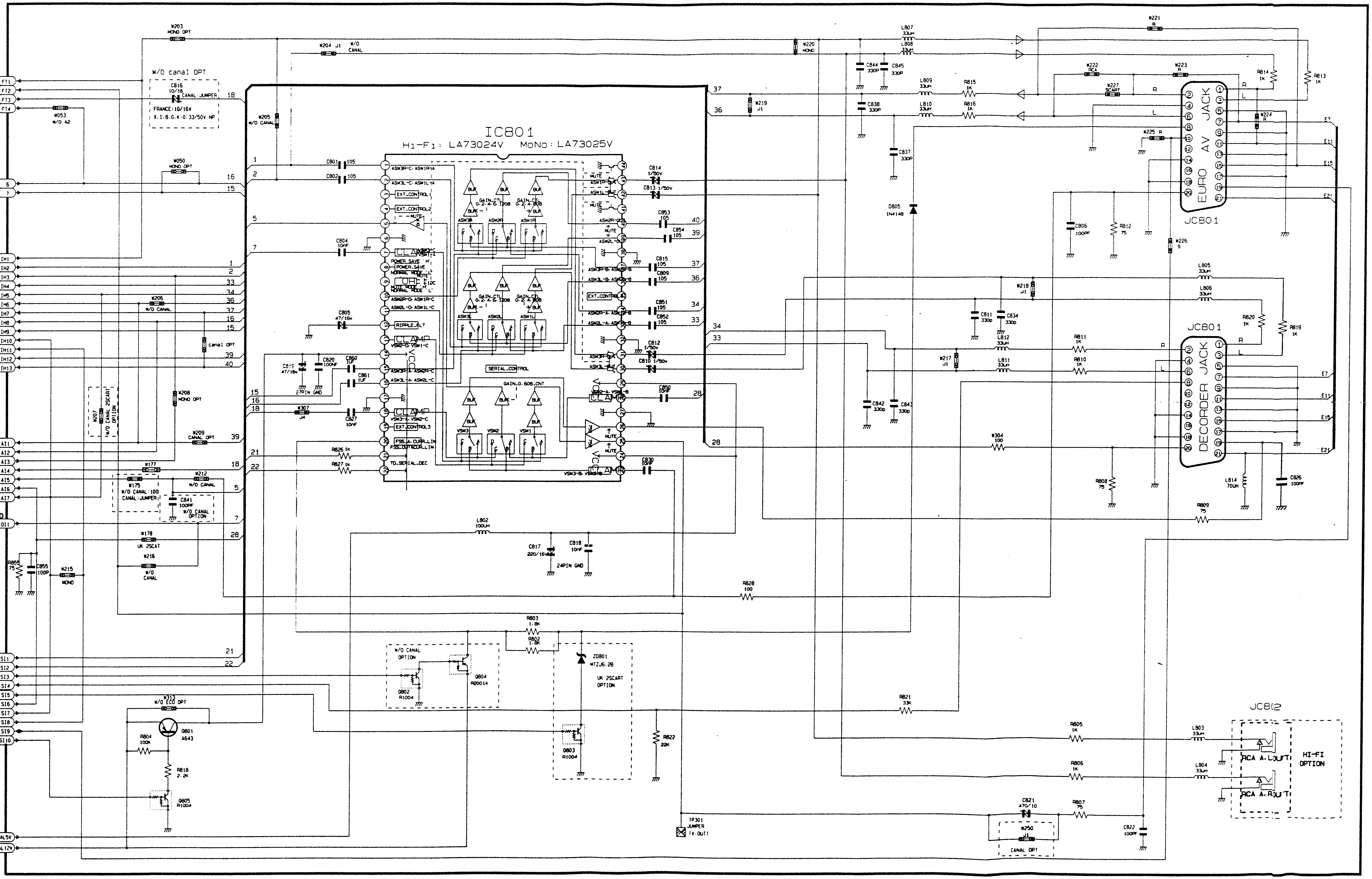
5-8 A2/NICAM


FROM/TO
TM
IIC DATA
TA1
IIC CLK
TA2
SIF IN
TA3
MONO A IN
TA4
FROM/TO
I/O
TU. L. OUT
OA1
TU. R. OUT
OA2
FROM/TO
POWER DRIVE
PC 5V
PC5V
PC 9V
PC9V
L4N02
100uH
C4N07
471
C4N08
152
C4N09
10/16V
C4N10
10/16V
D4N01
1N4148
C4N12
104
C4N11
3.3/50V
R4N06
100
R4N05
100
C4N06
103
C4N05
103
R4N04
27K
D4N02
1N4148
C4N04
2.2/50V
C4N18
471
C4N03
221
C4N01
152
C4N02
10/16V
L4N01
4.7uH
R4N03 100
R4N02 100
IC4N01
A2/NICAM MSP4317D
A2 MSP4307D
33 AHVSUP
32 NC
31 SC1_OUT_L
30 SC1_OUT_R
29 VREF12
28 NC
27 DACM_L
26 DACM_R
25 VREF2
24 NC
23 NC
22 PRESETQ
21 NC
20 DVSS
19 DVSUP
18 TP
17 NC
16 TP
15 TP
14 TP
13 12C_DA
12 12C_CL
11 STANDBYQ
10 ADR-SEL
9 TP
8 TP
7 NC
6 XTAL-OUT
5 XTAL-IN
4 TESTEN
3 ANA-IN-
2 ANA_IN1+
1 AVSUP
44 AVSS
43 MONO_IN
42 VREFTOP
41 SC1_IN_R
40 SC1_IN_L
39 NC
38 SC2_IN_R
37 SC2_IN_L
36 AGNDC
35 AHVSS
34 CAPL_M
34
C4N25
100NF
C4N14
10/16V
C4N13
104
L4N03
4.7uH
C4N16
47/16V
C4N15
104
C4N17
471
C4N19
47PF
XT4N01
18.432MHZ
C4N22
1.5PF
C4N21
1.5PF
R4N01
1K
L4N04
BEAD
D VSS
A VSS

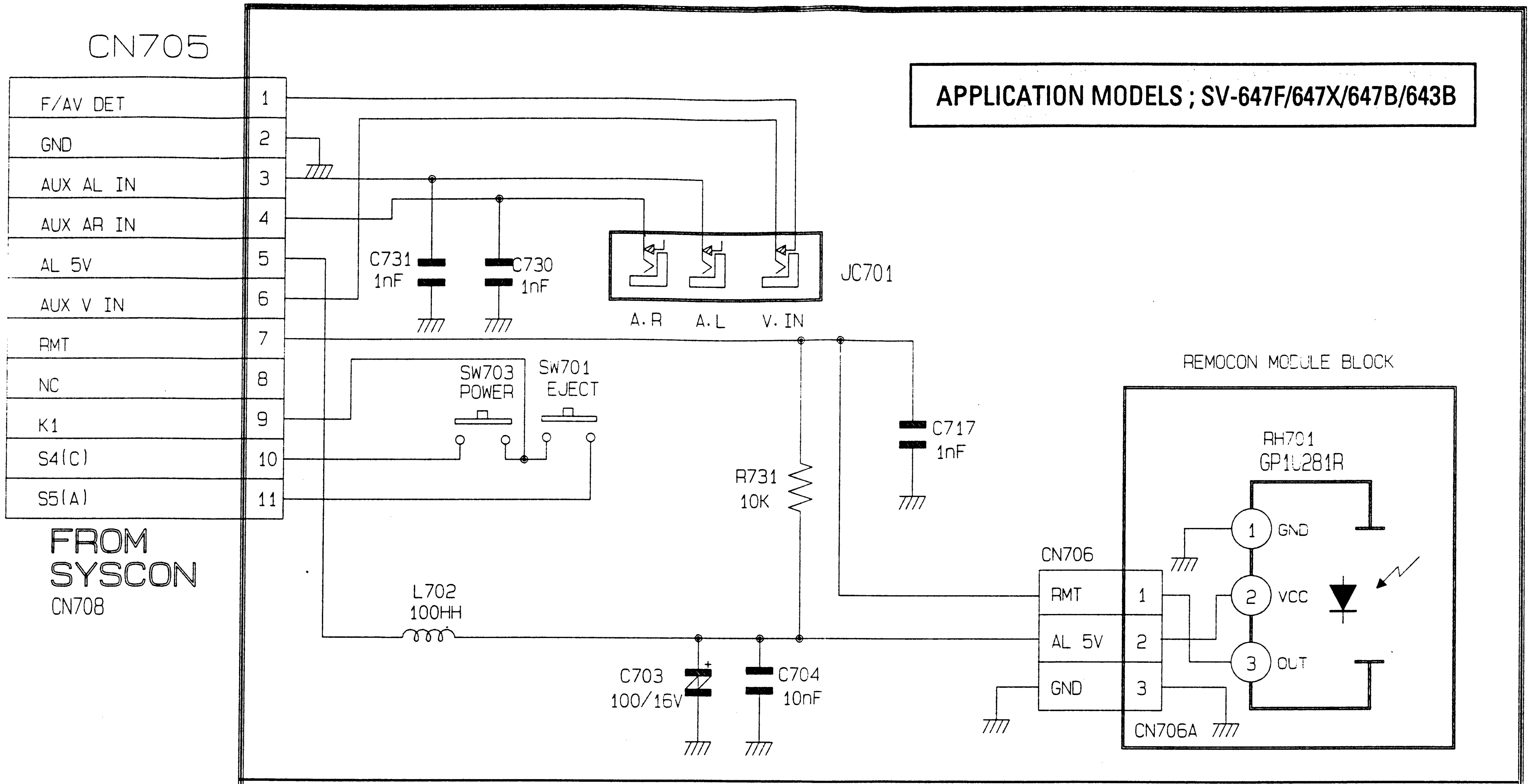
5-9 OSD/VPS/PDC

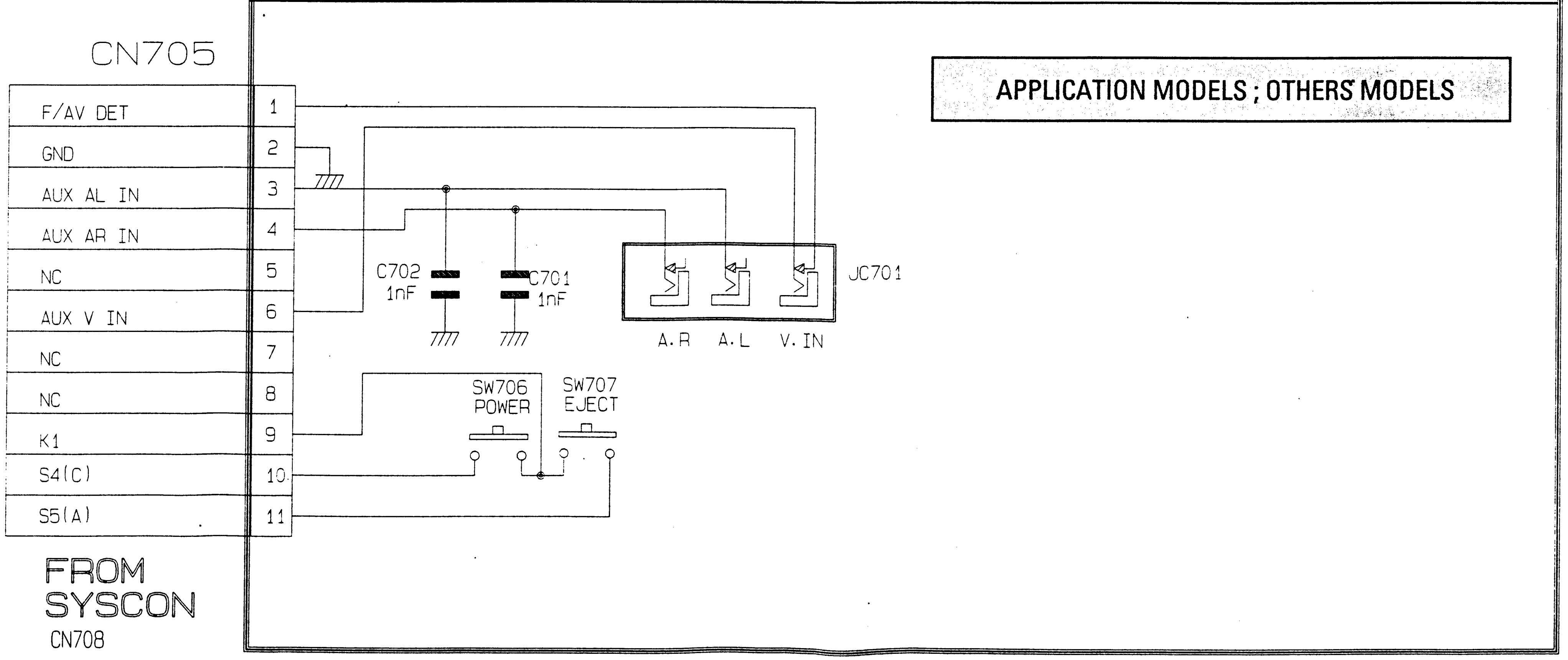

LC74776-9821 256F PDC(EC·SONY)
LC74759-9820 256 OSD(M/EAST·CIS·SONY)
LC74775NM-9808 128F PDC(EC)
LC74758-9779 128F OSD(EC)
LC74783-9745 128F OSD (VCP)
IC6P01
R6P11 390
L6P04 5.6uH
C6P01 10nF
Q6P03 KSA733
2FSC
C6P14 47pF
R6P01 100 PDC OPTION
IIC CLOCK
C6P04 27pF
L6P05 27UH
C6P05 27pF
ENABLE
CLK
DATA
1 VSS1
2 XTALin
3 XTALout
4 CTRL1
5 SCL
6 OSNin
7 OSCout
8 SYNCjdg
9 CS
10 SCLK
11 SIN
12 VDD2
13 CPOUT
14 VCPIN
15 VSS3
30 VDD1
29 RST
28 CDLR
27 SDA
26 SEPout
25 SEPc
24 SYNin
23 VDD1
22 CVCR
21 CVin
20 VSS2
19 CVout
18 VDD3
17 NC
16 VCOR
R6P03 2.7K
R6P04 10K
C6P07 4.7/50
C6P06 1nF
R6P06 5.6K
PDC OPTION
W315 VCP OPT
C6P11 1/50
R6P05 10K
W344 OSD OPTION
R6P02 100 PDC OPTION
C6P13 100nF
C6P12 47/16
IIC DATA
C6P10 1/50
C6P02 120PF OSD OPT
R6P09 JUMPER 2.2K:OSD ONLY
Q6P02 A733
R6P08 390
L6P03 22uH
C6P08 56pF
R6P07 200 100:W/O CANAL
R6P10 220 JUMPER:W/O CANAL
Q6P01 KSA733
C6P09 82P
TSB OPT
OSD VIDEO IN
OSD VIDEO OUT
OSD VIDEO IN
2FSC
FROM/TO AV
A01 OSD VIDEO IN
A02 2FSC
FROM POWER DRIVE
PC5V PC5V
FROM/TO I/O
OSD VIDEO OUT
OI1 OSD VIDEO OUT
FROM/TO SYSCON/SERVO
CLK
DATA
ENABLE
IIC CLK
IIC DATA
OS1 CLK
OS2 DATA
OS3 ENABLE
OS4 IIC CLK
OS5 IIC DATA

5-10 Input-Output


FROM/TO TM
RF A.OUT
RF V.OUT
TU V.IN
TU A.L.IN
FRON A2/NICAM
TU A.L.IN
TU A.R.IN
FROM/TO HI-FI
RF A.OUT
A.R.OUT
A.L.OUT
C.A.L.IN
C.A.R.IN
AV.A.L.IN
AV.A.R.IN
TU A.L.IN
TU A.R.IN
AUX A.L IN
AUX A.R IN
A.IN L
A.IN R
FROM/TO A/V
CANAL:AV.TU A.MONO
AV A.L.IN
TU A.L.IN
VCR A.OUT
TU V.IN
AV V.IN
AUX V. IN
AUX A.L. IN
FROM OSD/VPS/PDC OR OSD
OSD V.OUT
FROM/TO SYSCON/SERVO
IIC DATA
IIC CLK
SCART CTL
16:9 DET
16:9 CTL
AUX V.IN
AUX A.L.IN
AUX A.R.IN
AV LINK
ECO CTL
FROM POWER DRIVE
AL 5V
AL 12V
IC801
Hi-Fi: LA73024V MoNo: LA73025V
W/O canal OPT
FRANCE:10/16V
X.I.B.G.K:0.33/50V NP
EURO AV JACK
JC801
DECORDER JACK
JC802
RCA A.L.OUT
RCA A.R.OUT
HI-FI OPTION
W/O CANAL OPTION
UK 2SCART OPTION
ZD801 MTZJ6.2B
Q801 A643
Q802 R1004
Q803 R1004
Q804 R2001A
Q805 R1004
D805 1N4148
TP301 JUMPER (V.OUT)
CANAL OPT
24PIN GND
27PIN GND
SERIAL_CONTROL

5-11 Front A/V


APPLICATION MODELS ; SV-647F/647X/647B/643B
CN705
F/AV DET
GND
AUX AL IN
AUX AR IN
AL 5V
AUX V IN
RMT
NC
K1
S4(C)
S5(A)
1
2
3
4
5
6
7
8
9
10
11
FROM
SYSCON
CN708
C731
1nF
C730
1nF
JC701
A.R
A.L
V.IN
SW703
POWER
SW701
EJECT
C717
1nF
R731
10K
L702
100HH
C703
100/16V
C704
10nF
REMOCON MODULE BLOCK
RH701
GP1U281R
GND
VCC
OUT
CN706
RMT
AL 5V
GND
CN706A


APPLICATION MODELS ; OTHERS MODELS
CN705
F/AV DET
GND
AUX AL IN
AUX AR IN
NC
AUX V IN
NC
NC
K1
S4(C)
S5(A)
1
2
3
4
5
6
7
8
9
10
11
FROM
SYSCON
CN708
C702
1nF
C701
1nF
JC701
A.R
A.L
V.IN
SW706
POWER
SW707
EJECT

MEMO

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4. Electrical Parts List

Loc.No	Part No	Description ; Specification	Remark
		ASSY PCB-MAIN-FULL	S.N.A.
S.M.P.S. PARTS			
BD1SD1	AC27-92001M	INDUCTOR;70UH-M,RT,BFS3565R2F,-,-,-	
BD1SR1	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
BD1SS2	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
BD1SS3	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
C1SD03	2201-000812	C-CERAMIC,DISC;2.2nF,20%,400V,Y5U,BK,12	
C1SD04	2201-000812	C-CERAMIC,DISC;2.2nF,20%,400V,Y5U,BK,12	
C1SD11	2401-003302	C-AL;47uF,20%,400V,GP,TP,18X31.5,7	
C1SD12	2305-001029	C-FILM,MPEF;10nF,10%,630V,TP,12x9x12.5,5	
C1SD13	2301-000361	C-FILM,PEF;1.2nF,10%,50V,TP,-,5mm	
C1SR12	2401-000905	C-AL;22uF,20%,16V,BP,-,6x11,2.5mm	
C1SR14	2301-000445	C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm	
C1SS01	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13	⚠
C1SS02	2305-001021	C-FILM,MPEF;100nF,20%,275V,TP,17.5x7x13	⚠
C1SS31	2401-000385	C-AL;10uF,20%,100V,GP,TP,6.3x11,5	
C1SS32	2401-003137	C-AL;330UF,20%,50V,WT,TP,10X16MM,5	
C1SS33	2401-003477	C-AL;330UF,20%,25V,LZ,TP,10X12.5MM,	
C1SS34	2401-003477	C-AL;330UF,20%,25V,LZ,TP,10X12.5MM,	
C1SS35	2401-003480	C-AL;1000UF,20%,10V,LZ,TP,10X16MM,5	
C1SS36	2401-001479	C-AL;470uF,20%,10V,GP,TP,-,-	
C1SS39	2301-000129	C-FILM,PEF;100nF,5%,50V,TP,10X9X4.3X5,5m	
CN1SS1	3711-000178	CONNECTOR-HEADER;1WALL,2P,1R,3.96mm,STRA	
D1SD11	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SD31	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SR11	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1SS01	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS02	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS03	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS04	0402-001196	DIODE-RECTIFIER;1T5,600V,1A,TS-1,TP	
D1SS11	0402-000012	DIODE-RECTIFIER;UF4007,1KV,1A,DO-41,TP	
D1SS31	0402-001195	DIODE-RECTIFIER;F1T4,400V,1.0A,TS-1,TP	
D1SS32	0402-001194	DIODE-RECTIFIER;UG2D,200V,2A,DO-204AC,TP	
D1SS33	0404-001097	DIODE-SCHOTTKY;SG45,45V,7500mA,TO-220A,B	
F1SS01	3601-001123	FUSE-CARTRIDGE;250V,1.6A,TIME-LAG,CERAMI	⚠
IC1SS1	0604-001028	PHOTO-COUPLER;TR,50-600%,250mW,DIP-4,ST	⚠
IC1SS2	AC14-12006D	IC;KA431Z,TO-92,TAPING	
L1SS02	AC29-00002A	FILTER LINE NOISE;-,30mH,-,-,BLF-2116	⚠
L1SS31	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
L1SS32	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-	
PT1SS1	AC26-00002G	TRANS SWITCHING;EE2621,SV-643F,-,230V,FE	⚠
Q1SR01	0502-001050	TR-POWER;2SC4517A,NPN,30W,TO-220,ST,10-	
Q1SR02	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9	
R1SD11	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD12	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SD13	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD14	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD15	2001-000305	R-CARBON;110KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD16	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x	
R1SD31	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R1SD32	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1SR11	2003-000119	R-METAL OXIDE;0.68ohm,5%,2W,AE,TP,6x16mm	
R1SR12	2003-000264	R-METAL OXIDE;300ohm,5%,1W,AD,TP,4.3x12m	
R1SR14	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R1SS10	2006-000262	R-CEMENT;2.7ohm,10%,2W,CB,TP,7.5x11x20	
R1SS11	2003-000994	R-METAL OXIDE(S);33Kohm,5%,2W,AF,TP,3.9x	
R1SS32	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R1SS33	2004-000869	R-METAL;3Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
R1SS34	2004-000459	R-METAL;2.2Kohm,1%,1/8W,AA,TP,1.8x3.2m	
VA1SS1	1405-001026	VARISTOR;470V,600A,9x7mm,TP	⚠
ZD1SS1	0403-000571	DIODE-ZENER;UZP43B,43V,40-46V,1W,DO-41,T	

Loc.No	Part No	Description ; Specification	Remark
POWER DRIVE PARTS			
C1P102	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	
C1P103	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7.5	
C1P104	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7.5	
C1P105	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	
C1P106	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	
C1P108	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7.5	
D1P101	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D1P103	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
Q1P101	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P102	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,NPN,1W,TO-92L	
Q1P103	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q1P104	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q1P105	0504-000116	TR-DIGITAL;KSR1001,NPN,300MW,4.7K/4.7K,T	
R1P101	2001-000855	R-CARBON;560OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P102	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R1P103	2001-000036	R-CARBON;330OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P104	2001-000027	R-CARBON;100OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R1P105	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R1P106	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R1P107	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R1P108	2001-000611	R-CARBON;3.9KOHM,5%,1/4W,AA,TP,2.4X6.4M	
ZD1P02	0403-000717	DIODE-ZENER;MTZJ5.1B,5.1V,4.94-5.2V,500m	
ZD1P03	0403-000720	DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500	
SYSTEM CONTROL/SERVO PARTS			
BD601	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
C601	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11.5	
C602	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C603	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
C604	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
C605	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C606	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C607	2401-000118	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C607	2401-002259	C-AL;0.1F,+80-20%,5.5V,-,TP,12.5x11	BACK-UP (1HR) ONLY
C608	2203-000575	C-CERAMIC,CHIP;220NF,10%,25V,X7R,TP,2012	
C609	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C611	2301-000174	C-FILM,PEF;15nF,5%,100V,TP,7.2x4.0x7.5mm	
C612	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C613	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C615	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
C616	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C617	2401-000591	C-AL;1uF,20%,50V,BP,TP,3x5,2.5mm	
C618	2401-000360	C-AL;100uF,20%,50V,GP,TP,8x11.5,5	
C619	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C620	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C621	2401-000118	C-AL;1000uF,20%,10V,GP,TP,10x12.5,5	
C622	2203-001137	C-CERAMIC,CHIP;68nF,+80-20%,50V,Y5V,TP,2	
C623	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C624	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	BACK-UP (1HR) ONLY
C625	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	BACK-UP (1HR) ONLY
C626	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C627	2203-000634	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C629	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
C633	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C634	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C635	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
C636	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
C637	2203-000938	C-CERAMIC,CHIP;0.47nF,5%,50V,NP0,TP,2012	
C638	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7.5	
C639	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,2012	
C640	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7.5	

Loc.No	Part No	Description ; Specification	Remark
C641	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C644	2203-000595	C-CERAMIC,CHIP;0.22nF,5%,50V,NP0,TP,2012	
C646	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C651	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C652	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C653	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C690	2203-000989	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012	
C691	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C692	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C693	2401-001479	C-AL;470uF,20%,10V,GP,TP,-,-	
C695	2203-000361	C-CERAMIC,CHIP;0.15nF,5%,50V,NP0,TP,2012	
CN601	AC39-00036B	CBF HARNESS;-,-,-,-,-,-,-,YHL200-02P,-,-	
CN602	3708-001302	CONNECTOR-FPC/FC/PIC;7P,1.25mm,STRAIGHT,	
CN604	3711-003749	CONNECTOR-HEADER;BOX,8P,2R,2mm,STRAIGHT,	
D603	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D604	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D605	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D612	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
IC601	AC09-00218A	IC MICOM;uPD784928GC-F03-8EU,SV-647F,10	SV-647F/647X/647B ONLY
IC601	AC09-00208A	IC MICOM;784927GC-502-8EU,SV_643B-01,10	SV-643C/640B ONLY
IC601	AC09-00187A	IC MICOM;uPD784927GC-501-8EU,SV-643F-01	OTHER MODELS
IC604	AC14-12006C	IC;KA7533,DIP,-	
IC605	1103-001150	IC-EEPROM;524C80D81,8KBit,DIP,8P,300MIL,	SV-647F/647B/647X ONLY
IC605	1103-001150	IC-EEPROM;524C80D81,8KBit,DIP,8P,300MIL,	OTHERS MODELS ONLY
IC608	1203-000515	IC-VOL. DETECTOR;7042,TO-92,3P,177MIL,PL	BACK-UP (1HR) ONLY
IC610	1003-001318	IC-MOTOR DRIVER;LB11880,DIP,30P,417MIL,-	
L601	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L602	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L603	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
LD601	0601-000517	LED-IR;RECTANGULA,4x6.0mm,75mW,6V,950	
PT601	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
PT602	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
Q602	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
R601	2001-000850	R-CARBON;560KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R602	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R603	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
R607	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R608	2001-000864	R-CARBON;56KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R609	2001-000864	R-CARBON;56KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R610	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R611	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R613	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	BACK-UP (1HR) ONLY
R614	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R641	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R642	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R644	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R650	2003-000111	R-METAL OXIDE;0.47ohm,5%,1W,AD,TP,4.3x12	
R651	2007-000001	R-CHIP;68KOHM,5%,1/10W,DA,TP,2012	
R654	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R655	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R656	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012	
R657	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	BACK-UP (1HR) ONLY
R660	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R661	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R666	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R667	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R668	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R669	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R670	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R671	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R672	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R674	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R675	2001-000033	R-CARBON;180OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R676	2007-000738	R-CHIP;30KOHM,5%,1/10W,DA,TP,2012	
R677	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R678	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	

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R679	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R682	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R685	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R686	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R687	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R688	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R690	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012	
R691	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R692	2001-000568	R-CARBON;27OHM,5%,1/8W,AA,TP,1.8X3.2MM	BACK-UP (1HR) ONLY
R693	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R694	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R695	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	FRANCE models ONLY
R697	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R698	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R699	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
RS601	AC34-20100B	SWITCH-REC;-,-,X-9,-	
S601	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
S602	0603-001011	PHOTO-TR;NPN,35V,6V,50mA,75mW,BK	
SW601	AC34-20100A	SWITCH-MODE;-,-,X-9,-	
W038	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
W094	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
W095	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
W140	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
W304	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
W306	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
W752	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
XT601	2801-003318	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAP,12.5	BACK-UP (1HR) ONLY
XT602	2801-003139	CRYSTAL-UNIT;8MHz,50ppm,28-AAA,22pF,80oh	
AUDIO/VIDEO PARTS			
C301	2401-001919	C-AL;2.2uF,20%,50V,-,TP,4x7mm,5	
C302	2301-000283	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C303	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C304	2203-000683	C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,201	
C305	2203-000408	C-CERAMIC,CHIP;0.18nF,5%,50V,NP0,TP,2012	
C306	2203-001721	C-CERAMIC,CHIP;360pF,5%,50V,NP0,TP,2012,	
C307	2203-000392	C-CERAMIC,CHIP;0.015nF,5%,50V,SL,TP,2012	
C308	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C309	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C310	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C311	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C313	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
C314	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C315	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C316	2203-001064	C-CERAMIC,CHIP;56NF,10%,50V,NP0,TP,2012	
C318	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C320	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C321	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C322	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C323	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C324	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C325	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C326	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C327	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C328	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C329	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C330	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C331	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C332	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C333	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C334	2203-000989	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012	
C335	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C336	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C337	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C338	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C339	2203-000989	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012	

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C340	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C341	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C342	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C343	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C345	2203-001088	C-CERAMIC,CHIP;0.005nF,0.25pF,50V,NP0,TP	
C346	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C347	2203-001077	C-CERAMIC,CHIP;0.056nF,5%,50V,NP0,TP,201	
C348	2203-001077	C-CERAMIC,CHIP;0.056nF,5%,50V,NP0,TP,201	
C349	2203-000429	C-CERAMIC,CHIP;0.018nF,5%,50V,NP0,TP,201	
C350	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C360	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	Not used SV-640F/640B
C381	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C390	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C399	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C3A01	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C3A02	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C3A04	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C3A08	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C3A09	2301-001014	C-FILM,PEF;6.8nF,5%,50V,TP,7x3x6,5mm	
C3A10	2203-001214	C-CERAMIC,CHIP;8.2nF,10%,50V,X7R,TP,2012	
C3A11	2301-000174	C-FILM,PEF;15nF,5%,100V,TP,7.2x4.0x7.5mm	
C3A11	2301-000253	C-FILM,PEF;39NF,5%,100V,TP,7.5X4.5X12.5M	Not used AUDIO DUB ONLY
C3A12	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C3A13	2203-000323	C-CERAMIC,CHIP;12nF,10%,50V,X7R,TP,2012,	
C3A14	2203-001105	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,2012	
C3A15	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C3A16	2401-003122	C-AL;4.7uF,20%,50V,LL,TP,4X7,1.5	
C3A17	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3A18	2203-001665	C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,201	
C3A21	2203-000495	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012	
C3A23	2401-001169	C-AL;33uF,20%,16V,GP,-,6.3x7,2.5mm	
C3A24	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C3A25	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C3A29	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
C3A30	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C3D01	2301-000283	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	AUDIO DUB ONLY
C3D02	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	AUDIO DUB ONLY
C3D03	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	AUDIO DUB ONLY
C3D04	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	AUDIO DUB ONLY
C3D05	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	AUDIO DUB ONLY
CN301	3708-000391	CONNECTOR-FPC/FC/PIC;10P,1.25MM,STRAIGHT	
CN3A01	3708-001165	CONNECTOR-FPC/FC/PIC;6P,1.25mm,STRAIGHT,	
CN3A02	3710-001648	CONNECTOR-SOCKET;2P,1R,2.5mm,STRAIGHT,SN	
D302	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
FL3A01	AC27-80100C	COIL-OSC;7mm,2.4mH,-	
FL3D01	AC27-82001C	COIL-BIAS OSC;B02,W(TOKO)VX1850,-	AUDIO DUB ONLY
IC301	1204-001649	IC-VIDEO PROCESS;LA71598M,QFP,100P,-,PLA	
L301	2701-000206	INDUCTOR-AXIAL;56uH,5%,2.4x3.4mm	
L302	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L304	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L305	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L306	2701-000119	INDUCTOR-AXIAL;120uH,5%,2.4x3.4mm	
L310	2702-000106	INDUCTOR-RADIAL;100uH,10%,6.2x7.4mm	
L3A01	2702-000120	INDUCTOR-RADIAL;15mH,5%,6.2x7.4mm	
L3A02	2702-000106	INDUCTOR-RADIAL;100uH,10%,6.2x7.4mm	
L3A03	2702-000106	INDUCTOR-RADIAL;100uH,10%,6.2x7.4mm	
L3D01	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	AUDIO DUB ONLY
Q302	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q303	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q304	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q308	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q309	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3A01	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3A03	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9	
Q3A04	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9	
Q3A05	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9	

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Q3A06	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3D01	0501-000442	TR-SMALL SIGNAL;KTC3203-Y,NPN,400MW,TO-9	AUDIO DUB ONLY
Q3D02	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	AUDIO DUB ONLY
Q3D03	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	AUDIO DUB ONLY
R301	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R302	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R303	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R304	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R305	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R306	2001-000232	R-CARBON;1.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R308	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R309	2007-000859	R-CHIP;4.3KOHM,5%,1/10W,DA,TP,2012	
R311	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R312	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012	
R313	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R314	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R315	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R316	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	
R317	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R318	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012	
R320	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R321	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R322	2001-000539	R-CARBON;24KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R325	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R326	2007-001001	R-CHIP;510OHM,5%,1/10W,DA,TP,2012	
R327	2007-001001	R-CHIP;510OHM,5%,1/10W,DA,TP,2012	
R328	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R329	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R330	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R331	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R332	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R333	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R334	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R335	2001-000800	R-CARBON;5.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R336	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	
R341	2007-001208	R-CHIP;82KOHM,5%,1/10W,DA,TP,2012	
R342	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	
R346	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3A01	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3A04	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R3A05	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R3A06	2007-000449	R-CHIP;180OHM,5%,1/10W,DA,TP,2012	
R3A07	2007-000757	R-CHIP;330KOHM,5%,1/10W,DA,TP,2012	
R3A08	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012	
R3A09	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	
R3A10	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3A11	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R3A12	2007-000502	R-CHIP;2.2OHM,5%,1/10W,DA,TP,2012	
R3A13	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R3A14	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3A16	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R3A17	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
R3A18	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012	
R3A19	2007-000449	R-CHIP;180OHM,5%,1/10W,DA,TP,2012	
R3A22	2007-000703	R-CHIP;3.6KOHM,5%,1/10W,DA,TP,2012	
R3A23	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R3A24	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R3A25	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	
R3A26	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012	
R3A28	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3A30	2007-000498	R-CHIP;2.2MOHM,5%,1/10W,DA,TP,2012	
R3A32	2001-000605	R-CARBON;3.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3A37	2007-001141	R-CHIP;7.5KOHM,5%,1/10W,DA,TP,2012	
R3D01	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.2MM	AUDIO DUB ONLY
R3D02	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	AUDIO DUB ONLY
R3D03	2001-000745	R-CARBON;4.7OHM,5%,1/8W,AA,TP,1.8X3.2MM	AUDIO DUB ONLY

Loc.No	Part No	Description ; Specification	Remark
XT301	2801-001397	CRYSTAL-UNIT;4.433619MHZ,HC-49/U-S,15PPM	

TM-BLOCK

Loc.No	Part No	Description ; Specification	Remark
C401	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C402	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C403	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C404	2401-001085	C-AL;330nF,20%,50V,GP,-,5x9,2mm	
C405	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C406	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C407	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	Not used FRANCE models
C410	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
L401	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L402	2702-000106	INDUCTOR-RADIAL;100uH,10%,6.2x7.4mm	
R401	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R402	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	Not used FRANCE models
R403	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	Not used FRANCE models
R404	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R406	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	Not used FRANCE models
R407	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	Not used FRANCE models
R408	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	Not used FRANCE models
TM401	AC40-00001K	TM-BLOCK,TCPL0601PD11A,G/L-Splitter,TCP	FRANCE ONLY
TM401	AC40-00001J	TM-BLOCK,TCMI0611PD11A,UHF-I(MO/HI),TCM	U.K. ONLY
TM401	AC40-00001F	TM-BLOCK,TCMB0600PD11A,PAL-B/G(MONO),TC	SV-543X/540X ONLY
TM401	AC40-00001H	TM-BLOCK,TCMK0601PD11A,G/I/K(HIFI),TCMK	OTHER MODELS
ZD401	0403-000390	DIODE-ZENER;UZP33B,33V,31.4-34.6V,1W,DO-	

HI-FI PARTS

Loc.No	Part No	Description ; Specification	Remark
C501	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C502	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C503	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C504	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C505	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C506	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C507	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C508	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
C509	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C510	2401-003107	C-AL;47uF,20%,16V,GP,TP,5x7,5	
C511	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C512	2203-001665	C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,201	
C513	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C514	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C515	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C516	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C517	2203-000891	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012	
C518	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C519	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C520	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C521	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C522	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C523	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C524	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C525	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C526	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7,5	
C527	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C529	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C530	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C531	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
IC501	1204-001479	IC-AUDIO PROCESSOR;LA72634AM,QFP,64P,400	
L502	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
R501	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R502	2007-001224	R-CHIP;9.1KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R503	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R504	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R505	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R506	2007-001224	R-CHIP;9.1KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R507	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R508	2007-001055	R-CHIP;6.2KOHM,5%,1/10W,DA,TP,2012	
R509	2007-001055	R-CHIP;6.2KOHM,5%,1/10W,DA,TP,2012	
R510	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R511	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012	
R512	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R514	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R516	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R517	2007-001055	R-CHIP;6.2KOHM,5%,1/10W,DA,TP,2012	
R518	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	
R519	2007-001055	R-CHIP;6.2KOHM,5%,1/10W,DA,TP,2012	
R520	2001-000766	R-CARBON;43KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R521	2007-001055	R-CHIP;6.2KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R522	2007-001055	R-CHIP;6.2KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R523	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R524	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R525	2007-000671	R-CHIP;2KOHM,5%,1/10W,DA,TP,2012	
R533	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R540	2007-000003	R-CHIP;43KOHM,5%,1/10W,DA,TP,2012	SV-640B ONLY
R570	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R571	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	

SECAM PARTS (FRANCE ONLY)

Loc.No	Part No	Description ; Specification	Remark
C3S01	2202-000164	C-CERAMIC,MLC-AXIAL;0.18nF,10%,50V,Y5P,T	
C3S02	2401-001919	C-AL;2.2uF,20%,50V,-,TP,4x7mm,5	
C3S03	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C3S04	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C3S05	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C3S06	2203-000361	C-CERAMIC,CHIP;0.15nF,5%,50V,NP0,TP,2012	
C3S07	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C3S08	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C3S09	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C3S11	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C3S13	2401-001775	C-AL;470nF,20%,50V,GP,TP,4x7,5	
C3S14	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C3S15	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C3S17	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C3S19	2203-000595	C-CERAMIC,CHIP;0.22nF,5%,50V,NP0,TP,2012	
C3S20	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C3S21	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C3S22	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C3S23	2203-001046	C-CERAMIC,CHIP;0.051nF,5%,50V,NP0,TP,201	
C3S25	2203-000274	C-CERAMIC,CHIP;0.01nF,0.25pF,50V,NP0,TP,	
C3S26	2203-001245	C-CERAMIC,CHIP;0.082nF,5%,50V,NP0,TP,201	
C3S27	2203-001132	C-CERAMIC,CHIP;0.68nF,5%,50V,NP0,TP,2012	
D3S02	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
IC3S01	1204-001437	IC-CHROMA;LA7359,DIP,28P,400MIL,PLASTIC,	
L3S01	2702-000106	INDUCTOR-RADIAL;100uH,10%,6.2x7.4mm	
L3S02	2702-000179	INDUCTOR-RADIAL;6.8uH,5%,6x6.4mm	
L3S03	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
L3S04	2701-000195	INDUCTOR-AXIAL;47uH,5%,2.4x3.4mm	
L3S05	2701-000160	INDUCTOR-AXIAL;22uH,5%,2.4x3.4mm	
Q3S01	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q3S02	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S03	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	
Q3S04	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q3S05	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
R3S01	2007-000615	R-CHIP;24KOHM,5%,1/10W,DA,TP,2012	
R3S02	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R3S03	2001-001015	R-CARBON;9.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S04	2007-000615	R-CHIP;24KOHM,5%,1/10W,DA,TP,2012	
R3S05	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012	
R3S11	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S12	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012	
R3S13	2007-000738	R-CHIP;30KOHM,5%,1/10W,DA,TP,2012	
R3S14	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3S15	2007-001141	R-CHIP;7.5KOHM,5%,1/10W,DA,TP,2012	
R3S16	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R3S17	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R3S20	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R3S21	2001-000674	R-CARBON;360OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S22	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S23	2001-000539	R-CARBON;24KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S24	2001-000356	R-CARBON;150KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R3S25	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R3S26	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R3S27	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012	

A2/NICAM PARTS (Not used SV-543X/540X)

Loc.No	Part No	Description ; Specification	Remark
C4N01	2203-000142	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,2012	
C4N02	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N03	2203-000595	C-CERAMIC,CHIP;0.22nF,5%,50V,NP0,TP,2012	
C4N04	2401-001919	C-AL;2.2uF,20%,50V,-,TP,4x7mm,5	
C4N05	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C4N06	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C4N07	2203-000938	C-CERAMIC,CHIP;0.47nF,5%,50V,NP0,TP,2012	
C4N08	2203-000142	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,2012	
C4N09	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N10	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N11	2401-001020	C-AL;3.3UF,20%,50V,GP,TP,4X7,5	
C4N12	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C4N13	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C4N14	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5	
C4N15	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C4N16	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C4N17	2203-000938	C-CERAMIC,CHIP;0.47nF,5%,50V,NP0,TP,2012	
C4N18	2203-000938	C-CERAMIC,CHIP;0.47nF,5%,50V,NP0,TP,2012	
C4N19	2202-000279	C-CERAMIC,MLC-AXIAL;47pF,5%,50V,SL,TP,3.	
C4N21	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NP0,TP,4	
C4N22	2201-002069	C-CERAMIC,DISC;1.5pF,0.25pF,50V,NP0,TP,4	
C4N25	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	
D4N01	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D4N02	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
IC4N01	1204-001765	IC-AUDIO PROCESSOR;MSP3417D(PQFP),PQFP,4	
L4N01	2702-000160	INDUCTOR-RADIAL;4.7uH,10%,6x6.4mm	
L4N02	2702-000106	INDUCTOR-RADIAL;100uH,10%,6.2x7.4mm	
L4N03	2702-000160	INDUCTOR-RADIAL;4.7uH,10%,6x6.4mm	
L4N04	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
R4N01	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R4N02	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R4N03	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R4N04	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	
R4N05	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R4N06	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
XT4N01	2801-003171	CRYSTAL-UNIT;18.432MHz,20PPM,28-AAM,4PF,	

VPS/PDC PARTS

Loc.No	Part No	Description ; Specification	Remark
C6P01	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C6P04	2203-000683	C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,201	
C6P05	2203-000683	C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,201	
C6P06	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
C6P07	2401-002299	C-AL;4.7uF,20%,50V,GP,TP,5x7,5	
C6P08	2202-000286	C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.	
C6P10	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C6P11	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
C6P12	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C6P13	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C6P14	2203-001002	C-CERAMIC,CHIP;0.047nF,5%,50V,NP0,TP,201	
IC6P01	1204-001794	IC-AUDIO PROCESSOR;LC74775NM-9808,MPF,30	
L6P03	2701-000160	INDUCTOR-AXIAL;22uH,5%,2.4x3.4mm	
L6P04	2701-000201	INDUCTOR-AXIAL;5.6uH,5%,2.4x3.4mm	
L6P05	2701-000165	INDUCTOR-AXIAL;27uH,5%,2.4x3.4mm	
Q6P01	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q6P02	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q6P03	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
R6P01	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R6P02	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R6P03	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R6P04	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R6P05	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R6P06	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012	
R6P07	2001-000490	R-CARBON;200OHM,5%,1/8W,AA,TP,1.8X3.2MM	Not used SV-640B
R6P07	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	SV-640B ONLY
R6P08	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
R6P10	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	Not used SV-640B
R6P11	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012	

INPUT-OUTPUT PARTS

Loc.No	Part No	Description ; Specification	Remark
C801	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C802	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C804	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	Not used SV-640B
C805	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	Not used SV-640B
C806	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,2012	Not used SV-640B
C807	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	Not used SV-640B
C808	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,80-20%,50V,Y5V	Not used SV-640B
C809	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C810	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	Not used U.K. models
C811	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	Not used U.K. models
C812	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	Not used U.K. models
C813	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	Not used SV-640B
C814	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	Not used SV-640B
C815	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C816	2401-001074	C-AL;0.33uF,20%,50V,BP,TP,4x5mm,2	SV-640B ONLY
C817	2401-000810	C-AL;220uF,20%,16V,GP,TP,8x11.5,5	
C818	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C819	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	Not used SV-640B
C820	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	Not used SV-640B
C821	2401-001479	C-AL;470uF,20%,10V,GP,TP,-,-	SV-640B ONLY
C822	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,2012	
C826	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,2012	Not used U.K. models
C827	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	Not used SV-640B
C830	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	Not used SV-640B
C834	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	Not used U.K. models
C837	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	
C838	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	
C841	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	SV-640B ONLY
C842	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	
C843	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	
C844	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	
C845	2203-000784	C-CERAMIC,CHIP;0.33nF,5%,50V,NP0,TP,2012	
C850	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	Not used SV-640B
C851	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C852	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C853	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C854	2203-000476	C-CERAMIC,CHIP;1000nF,+80-20%,16V,Y5V,TP	Not used SV-640B
C855	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	Not used SV-640F/640B
R802	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R803	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R804	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R805	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R806	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R807	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	
R808	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	
R809	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	Not used U.K. models
R810	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R811	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R812	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012	
R813	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R814	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	

Loc.No	Part No	Description ; Specification	Remark
R815	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R816	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R818	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R819	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	Not used U.K. models
R820	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	Not used U.K. models
R821	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012	
R822	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012	
R826	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	Not used SV-640B
R827	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	Not used SV-640B
R828	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
R855	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	Not used SV-640F/640B
D805	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
IC801	1204-001763	IC-AUDIO PROCESSOR;LA73024V,SSOP,44P,154	Not used SV-640B
JC801	3722-001573	JACK-SCART;42P/2R,-,SN,BLK/BLU,#20-28	
JC802	3722-001576	JACK-RCA;2P,3.5mm,NI,BLK,-	
L802	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
L803	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L804	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L805	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	Not used U.K. models
L806	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	Not used U.K. models
L807	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L808	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L809	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L810	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L811	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L812	2701-000181	INDUCTOR-AXIAL;33uH,5%,2.4x3.4mm	
L814	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
Q801	0501-000290	TR-SMALL SIGNAL;KSA643-Y,PNP,500mW,TO-92	
Q802	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	SV-640B ONLY
Q803	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	SV-640B ONLY
Q804	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K/4.7K,T	SV-640B ONLY
Q805	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47K,TO-	
ZD801	0403-000595	DIODE-ZENER;MTZJ6.2,6.2V,5.78-6.44V,500m	SV-640B ONLY
AV-LINK PARTS (OPTION)			
C750	2203-000335	C-CERAMIC,CHIP;0.012nF,5%,50V,NP0,TP,201	
C751	2203-000335	C-CERAMIC,CHIP;0.012nF,5%,50V,NP0,TP,201	
C752	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
IC750	AC09-00214A	IC MICOM;78902 66B-A56-8ES,SCP_AV_LINK,4	
R750	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012	
R751	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	
R752	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
XT750	2801-003868	CRYSTAL-UNIT;5MHz,30ppm,28-AAA,12pF,100o	
DIAPLAY/FUNCTION MATRIX PARTS			
C701	2401-001479	C-AL;470uF,20%,10V,GP,TP,-,-	
C702	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
C703	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-	
CN708	3711-004415	CONNECTOR-HEADER;3WALL,11P,1R,2mm,STRAIG	Not used SV-640F/640B
D701	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D702	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D703	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D704	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D705	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D708	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D709	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D720	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
DT701	AC07-00011A	LED DISPLAY;BCD-9011A,TS10,46,8,6,52.6x2	5-DIGIT
DT701	AC07-00006A	LED DISPLAY;A-304EG,X-9,35,8,5,50x18.5,G	4-DIGIT
Q701	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q702	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q703	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q704	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q705	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q706	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q707	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q708	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q711	0501-000290	TR-SMALL SIGNAL;KSA643-Y,PNP,500mW,TO-92	
Q712	0501-000290	TR-SMALL SIGNAL;KSA643-Y,PNP,500mW,TO-92	
Q713	0501-000290	TR-SMALL SIGNAL;KSA643-Y,PNP,500mW,TO-92	
Q714	0501-000290	TR-SMALL SIGNAL;KSA643-Y,PNP,500mW,TO-92	
Q715	0501-000290	TR-SMALL SIGNAL;KSA643-Y,PNP,500mW,TO-92	
Q716	0501-000290	TR-SMALL SIGNAL;KSA643-Y,PNP,500mW,	SV-647F/647X/647B/640B ONLY
R701	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R702	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R703	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R704	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R705	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R706	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R707	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R708	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R710	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R711	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R712	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R713	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R714	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R715	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R716	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8	SV-647F/647X/647B/640B ONLY
R717	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R718	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R719	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R720	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R721	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R722	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R723	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R727	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R728	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R731	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R753	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
SW701	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW703	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW708	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW709	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW710	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW711	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW712	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW713	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW714	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW715	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW716	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW717	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW718	3404-001076	SWITCH-TACT;12V,50mA,16gf+-50gf,6x6mm,SP	
SW719	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
-	-	**ASSY PCB-F.AV;SV-647F/647X/647B/643B**	S.N.A.
C703	2401-002165	C-AL;100uF,20%,16V,GP,TP,6.3x7.5	
C704	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
C717	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C730	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
C731	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,1	
CN705	3710-001564	CONNECTOR-SOCKET;11P,1R,2mm,ANGLE,SN	
CN706	AC39-20817T	LEAD CONNECTOR-ASSY;DP,YBNH200-03,YBST20	
JC701	AC37-00006A	JACK—PIN;3.2MM,DPSE-9872,3P,ARREY,10MM	
L702	2701-000002	INDUCTOR-AXIAL;100uH,10%,4.2x9.8mm	
R731	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
RM701	AC59-60060A	MODULE-REMOCON;GP1U281R,SHARP,38KHZ,-,-	
SW701	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW703	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
		ASSY-PCB-F/AV-HIFI;OTHER MODELS	S.N.A.
C701	2201-000281	C-CERAMIC,DISC;1nF,+80-20%,50V,Y5V,TP,5x	
C702	2201-000281	C-CERAMIC,DISC;1nF,+80-20%,50V,Y5V,TP,5x	
CN705	3710-001564	CONNECTOR-SOCKET;11P,1R,2mm,ANGLE,SN	
JC701	AC37-22002G	JACK-PIN;3.2mm,DPSE-9813,3P,13mm,ARREY	
SW706	3404-001008	SWITCH-TACT;15V,20mA,160gf,6x7.9x3.5mm,S	
SW707	3404-001008	SWITCH-TACT;15V,20mA,160gf,6x7.9x3.5mm,S	

Loc.No	Part No	Description ; Specification	Remark

MEMO

5. Schematic Diagrams

◆ Block Identification of Main PCB ---------- 5-2

5-1 S.M.P.S. ---------- 5-3

5-2 Power Drive ---------- 5-4

5-3 System Control/Servo/Display ---------- 5-5

5-4 Audio/Video ---------- 5-6

5-5 Hi-Fi ---------- 5-7

5-6 TM ---------- 5-8

5-7 SECAM ---------- 5-9

5-8 A2/NICAM ---------- 5-10

5-9 OSD/VPS/PDC ---------- 5-11

5-10 Input-Output ---------- 5-12

5-11 Front A/V ---------- 5-13

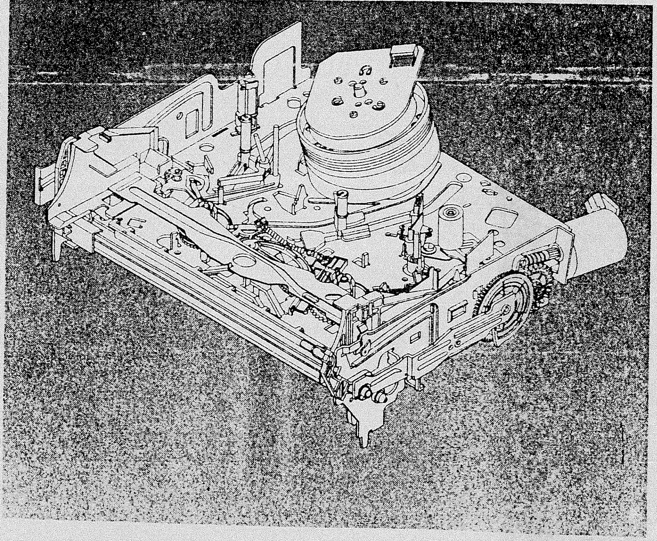
SAMSUNG

TS-10 DECK

MECHANICAL Manual

◆ File with the SERVICE MANUAL.

TS-10 DECK



CONTENTS

1. Disassembly and Reassembly

2. Alignment and Adjustment

1. Disassembly and Reassembly

1-1 Deck Parts Locations

1-1-1 Top View

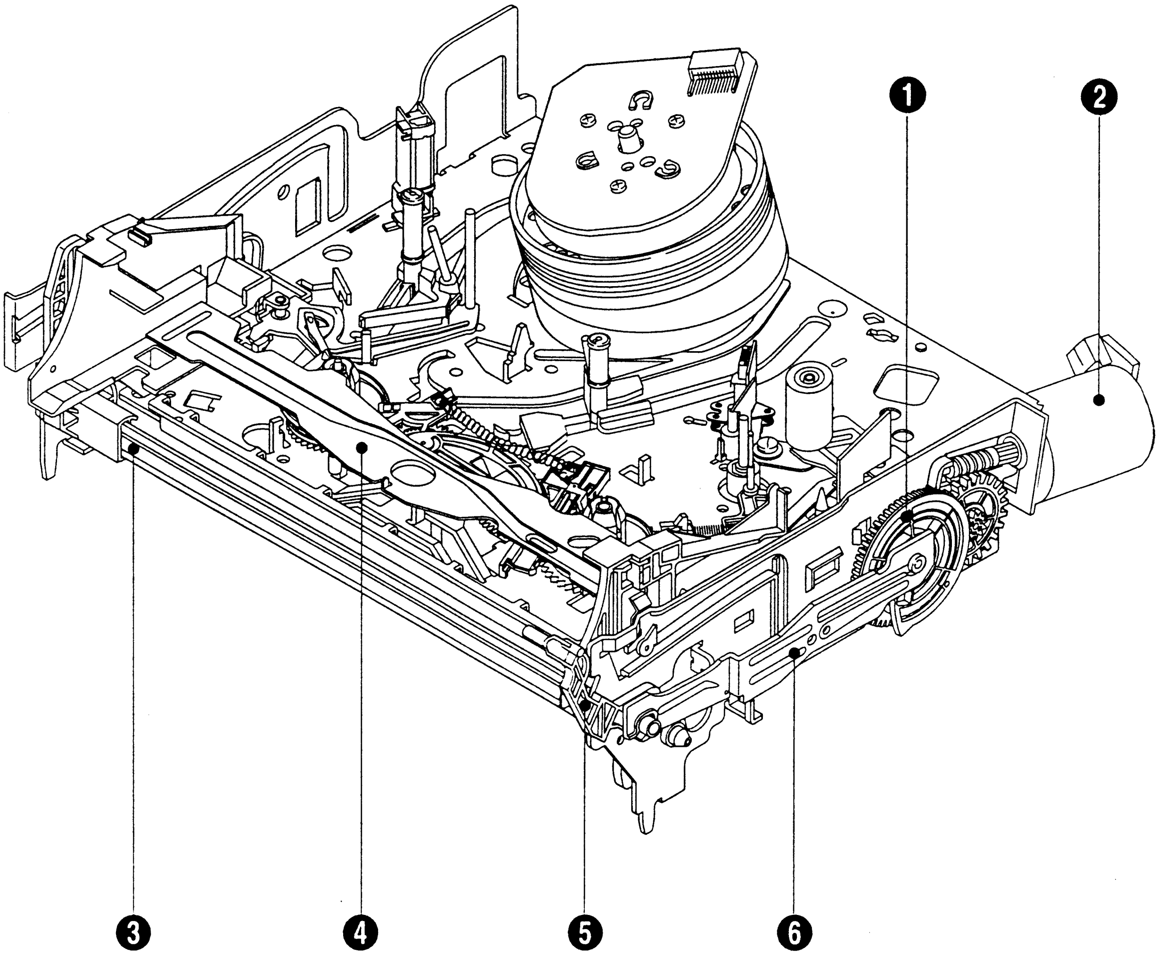


Fig. 1-1 Top parts Location-1

❶ GEAR FL CAM
❷ MOTOR LOADING ASS'Y
❸ LEVER FL ARM ASS'Y
❹ HOLDER FL CASSETTE ASS'Y
❺ LEVER FL DOOR
❻ SLIDER FL DRIVE

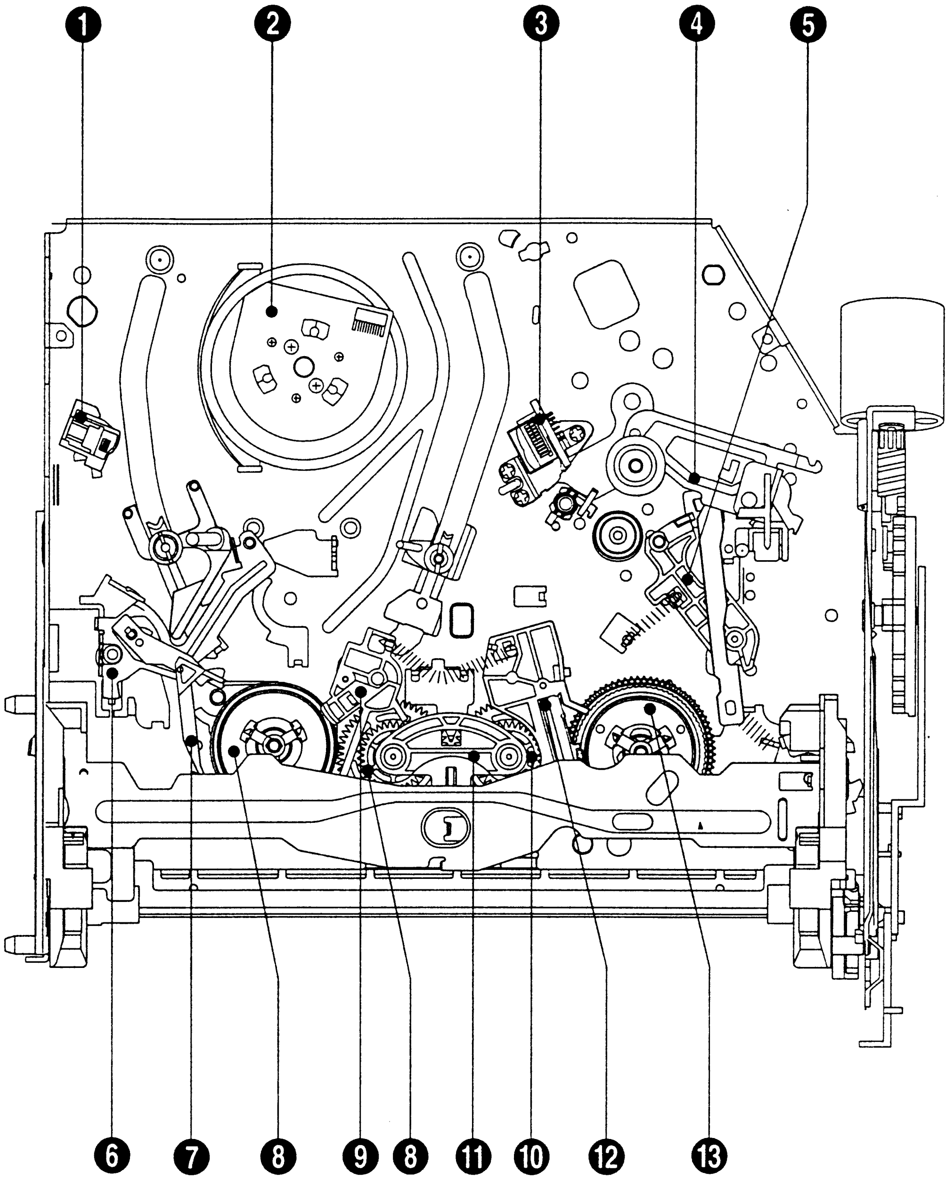


Fig. 1-2 Top Parts Location-2

❶ FE HEAD
❷ CYLINDER ASS'Y
❸ ACE HEAD ASS'Y
❹ LEVER UNIT PINCH ASS'Y
❺ LEVER #9 GUIDE ASS'Y
❻ LEVER TENSION ASS'Y
❼ BAND BRAKE ASS'Y
❽ DISK S REEL
❾ LEVER S BRAKE ASS'Y
❿ GEAR IDLE
⓫ LEVER IDLE
⓬ LEVER T BRAKE ASS'Y
⓭ DISK T REEL

1-1-2 Bottom View

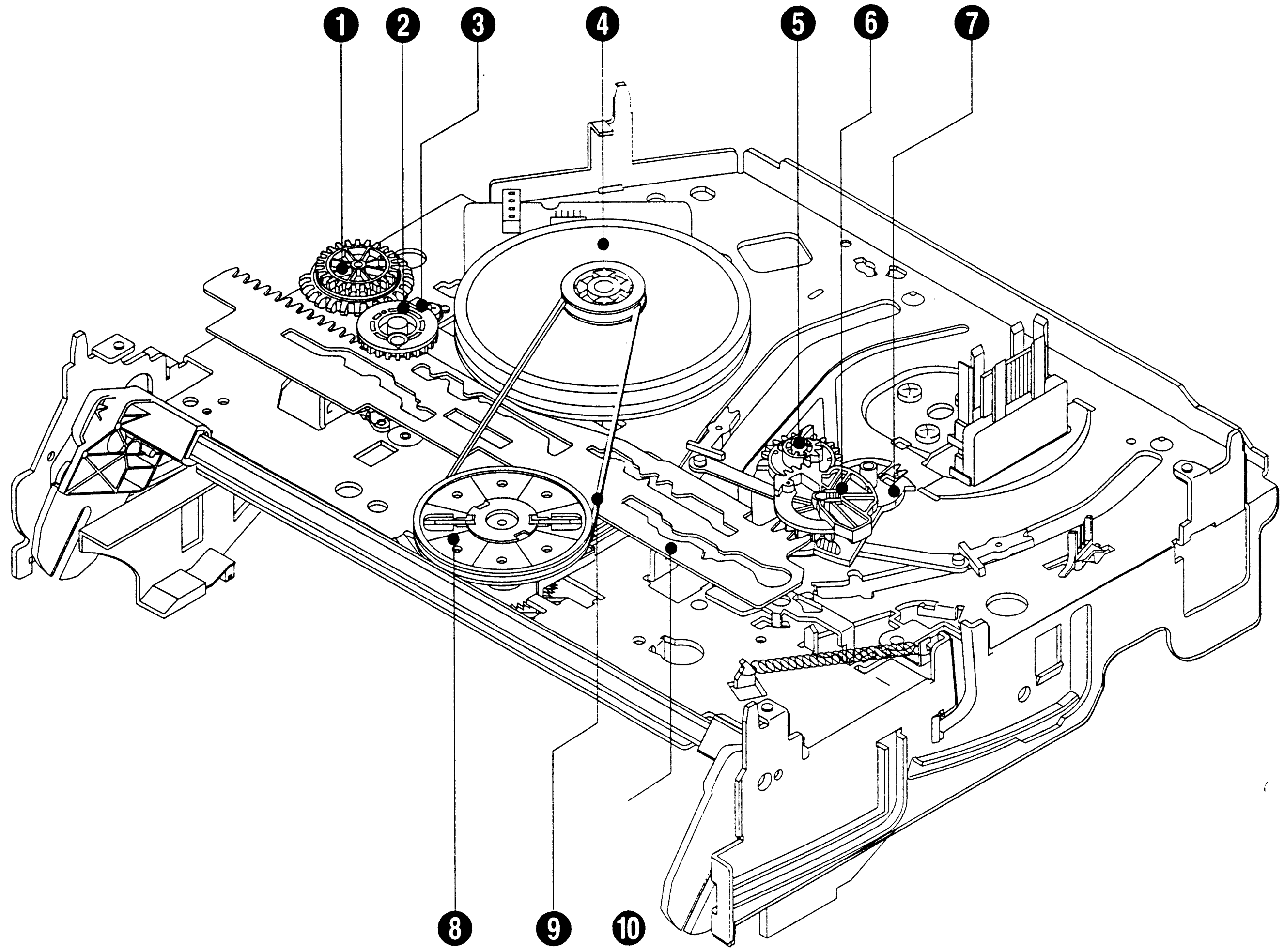


Fig. 1-3 Bottom Parts Location

❶ GEAR JOINT 1
❷ GEAR JOINT 2
❸ BRACKET GEAR
❹ MOTOR CAPSTAN ASS'Y
❺ LEVER T LOAD ASS'Y
❻ GEAR LOADING DRIVE
❼ LEVER S LOAD ASS'Y
❽ HOLDER CLUTCH ASS'Y
❾ BELT PULLEY
❿ SLIDER CAM

1-2 Main Deck

1-2-1 Lever FL Door Removal

1) Push the Holder FL Cassette Ass'y ❶ about 20mm in the direction of arrow "A".
2) Rotate the Lever FL Door ❷ in the direction of arrow "B".
3) Release the Hook ❸ and Remove the Lever FL Door ❷ in the direction of arrow "C".

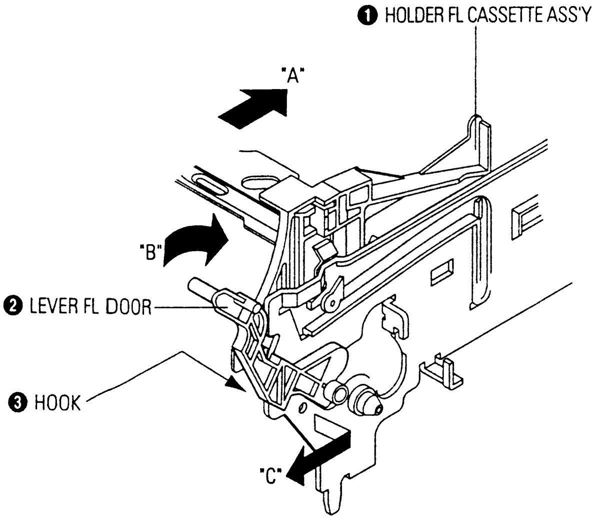

❶ HOLDER FL CASSETTE ASS'Y
"A"
"B"
❷ LEVER FL DOOR
❸ HOOK
"C"

Fig. 1-4 Lever FL Door Removal

1-2-2 Holder FL Cassette Ass'y Removal

1) Pull the Holder FL Cassette Ass'y ❶ to the eject position.
2) Pull the Holder FL Cassette Ass'y ❶ as grasping the Holder FL Cassette Ass'y ❶ and Lever FL Cassette-R ❷ in the same time to release hooking from Main Base until the Boss [A] of Holder FL Cassette Ass'y ❶ is taken out from the Rail [B].
3) Lift the Holder FL Cassette Ass'y ❶, in this time, you have to grasp the Lever FL Cassette-R ❷ Continuously until the Holder FL Cassette Ass'y ❶ is taken out completely.

Note : Be sure to insert Lever FL Cassette-R ❷ in the direction of "A" to prevent separation and breakage of the Lever FL Cassette-R ❷ at disassembling and reassembling.

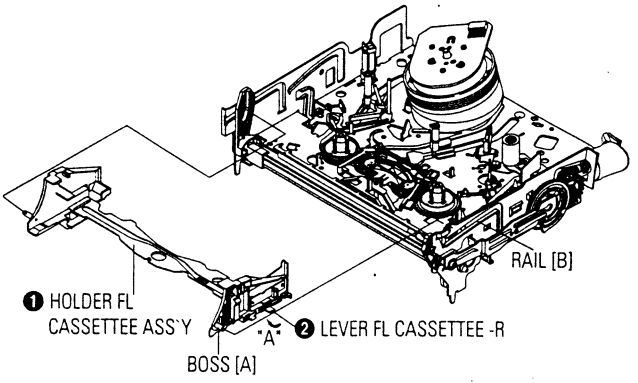

RAIL [B]
❶ HOLDER FL CASSETTEE ASS'Y
"A"
❷ LEVER FL CASSETTEE -R
BOSS [A]

Fig. 1-5 Holder FL Cassette Ass'y Removal

1-2-3 Slider FL Drive, Gear FL Cam Removal

1) Pull the Slider FL Drive ❶ to the front direction.
2) Remove the Slider FL Drive ❶ in the direction of arrow. (Refer to Fig. 1-6)
3) Remove the Gear FL cam ❷.

Note : When reinstalling be sure to reassemble Slider FL drive ❶ after you insert the Boss of Lever FL ARM-R in Groove of Slider Fl drive ❶.

Assembly : Align the Gear FL Cam ❶ with the Gear worm wheel Post as shown drawing.
(Refer to Timing point)

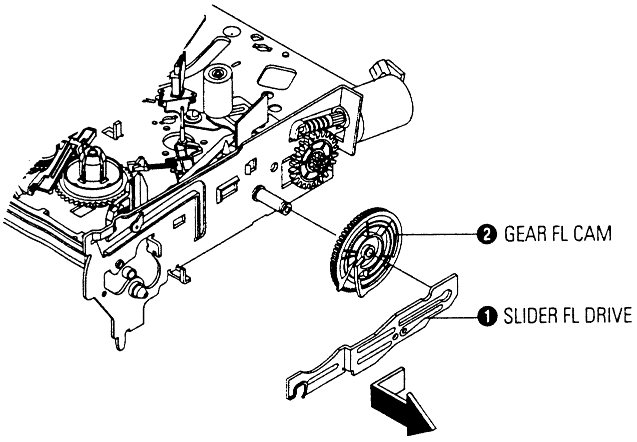

❷ GEAR FL CAM
❶ SLIDER FL DRIVE

Fig. 1-6 Slider FL Drive Removal

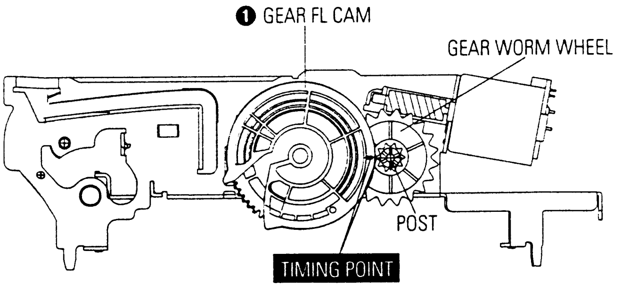

❶ GEAR FL CAM
GEAR WORM WHEEL
POST
TIMING POINT

Fig. 1-7 Gear FL Cam, Gear Worm

1-2-4 Lever FL Arm Ass'y Removal

1) Push the hole "A" in the direction of arrow "B" use the pin.(about Dia. 2.5)
2) Pull out the Lever FL Arm Ass'y ❶ from the Boss of Main Base.
3) Remove the Lever FL Arm Ass'y ❶ in the direction of arrow "C".

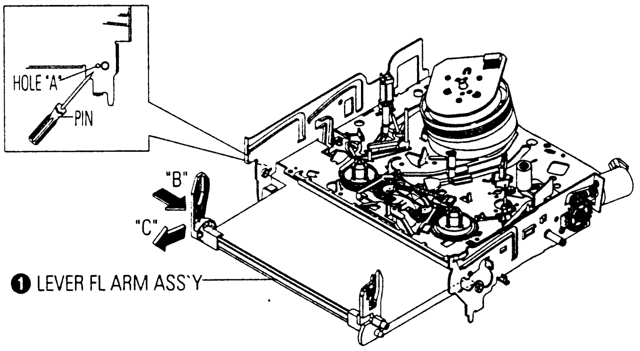

HOLE "A"
PIN
"B"
"C"
❶ LEVER FL ARM ASS'Y

Fig. 1-8 Lever FL Arm Ass'y Removal

1-2-5 Gear Worm Wheel Removal

1) Remove the Gear Worm wheel ❶.

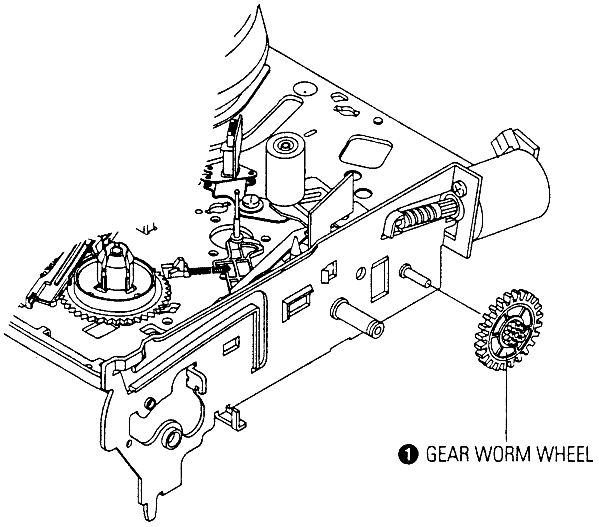

❶ GEAR WORM WHEEL

Fig. 1-9 Gear Worm Wheel Removal

1-2-6 Motor Loading Ass'y Removal

1) Remove the screw ❶.
2) Remove the Motor Loading Ass'y ❷.

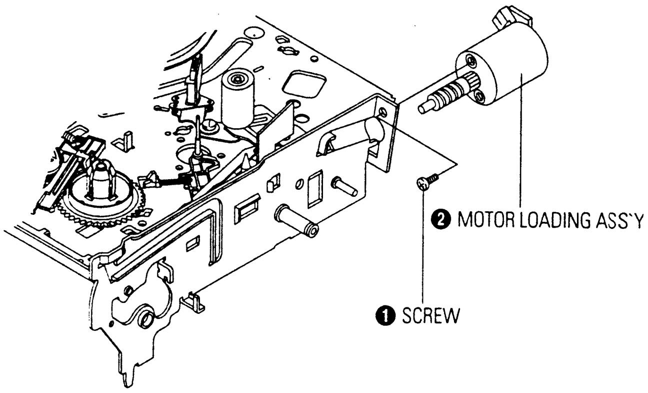

❷ MOTOR LOADING ASS'Y
❶ SCREW

Fig. 1-10 Motor Loading Ass'y Removal

1-2-7 Bracket Gear, Gear Joint 2, 1 Removal

1) Remove the SCREW ❶.
2) Remove the Bracket Gear ❷.
3) Remove the Gear Joint 2 ❸.
4) Remove the Gear Joint 1 ❹.

Assembly :

1) Be sure to align dot mark of Gear Joint 1 ❶ with dot mark of Gear Joint 2 ❷ as shown Fig 1-12. (Refer to Timing point1)
2) Confirm the Timing Point 2 of the Gear Joint 2 ❷ and Slider Cam ❸.

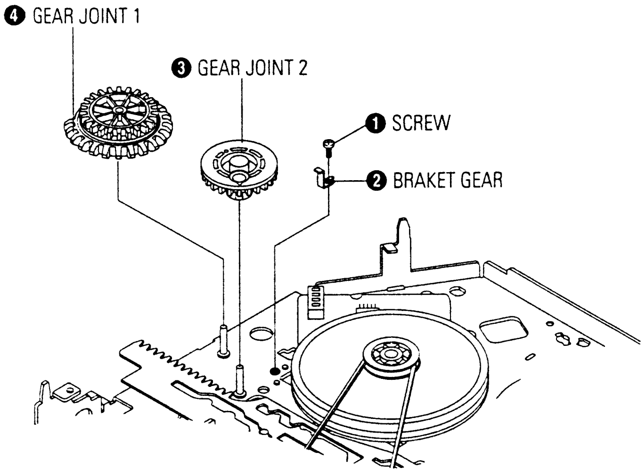

❹ GEAR JOINT 1
❸ GEAR JOINT 2
❶ SCREW
❷ BRAKET GEAR

Fig. 1-11 Bracket Gear, Gear Joint 1,2 Removal

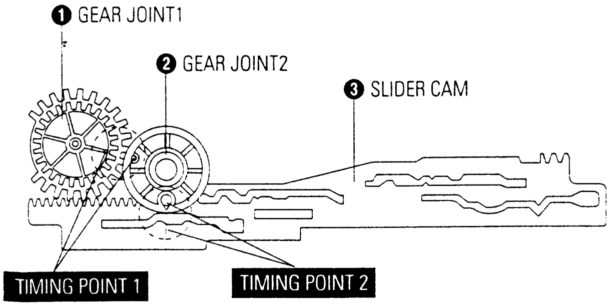

❶ GEAR JOINT1
❷ GEAR JOINT2
❸ SLIDER CAM
TIMING POINT 1
TIMING POINT 2

Fig. 1-12 Gear Joint 1,2 Assembly

1-2-8 Gear Loading Drive, Slider Cam, Lever Load S, T Ass'y Removal

1) Remove the Belt Pulley. (Refer to Fig. 1-30)
2) Remove the Gear Loading Drive ❶ after releasing Hook [A] in the direction arrow as shown in detail drawing.
3) Remove the Slider Cam ❷.
4) Remove the Lever Load ❸, Link Load ❺ & Lever Load ❹, Link Load ❻.

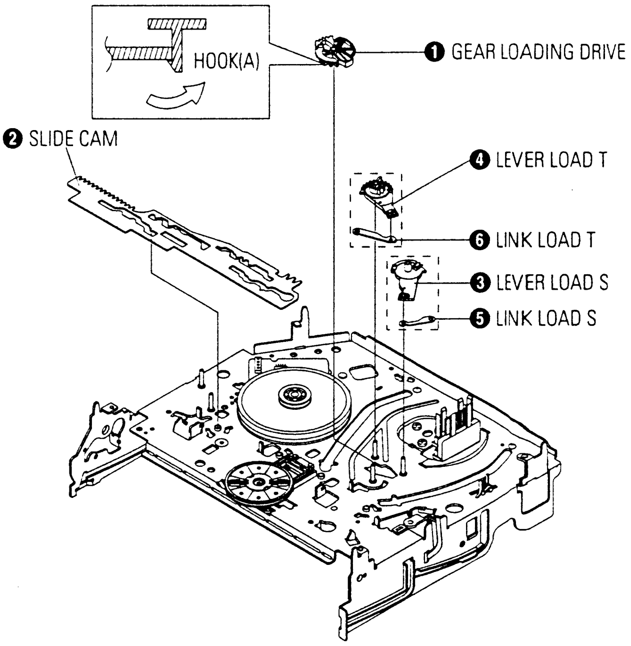

HOOK(A)
❶ GEAR LOADING DRIVE
❷ SLIDE CAM
❹ LEVER LOAD T
❻ LINK LOAD T
❸ LEVER LOAD S
❺ LINK LOAD S

Fig. 1-13 Gear Loading Drive, Slider Cam, Lever T, S Load Ass'y Removal

1-2-9 Gear Loading Drive, Slider Cam, Lever Load S, T Ass'y Assembly

1) When reinstalling, be sure to align dot of Lever Load T Ass'y ❶ with dot of Lever Load S Ass'y ❷ as shown in drawing, (Refer to Timing Point 1).
2) Insert the Pin A,B,C,D into the Slider Cam ❸ hole,
3) Be sure to align dot of Lever Load T ❶ and dot of Gear Loading Drive ❹, (Refer to Timing Point 2).
4) Aline dot of Gear Loading drive ❹ with mark of Slider Cam ❸ as shown in drawing(Refer to Timing Point 3).

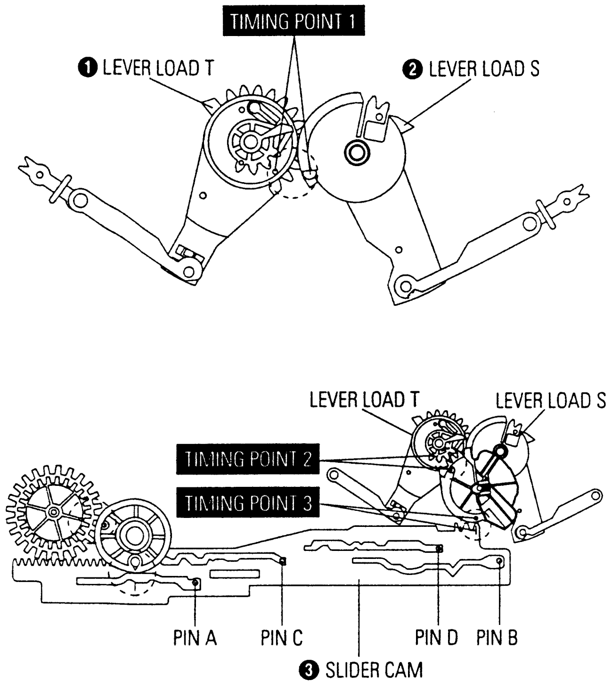

TIMING POINT 1
❶ LEVER LOAD T
❷ LEVER LOAD S
LEVER LOAD T
LEVER LOAD S
TIMING POINT 2
TIMING POINT 3
PIN A
PIN C
PIN D
PIN B
❸ SLIDER CAM

Fig. 1-14 Gear Loading Drive, Slider Cam, Lever Load S, T Ass'y Assembly

1-2-10 Lever Pinch Drive, Lever Tension Drive Removal

1) Remove the Lever Pinch Drive ❶, Lever Tension Drive ❷.

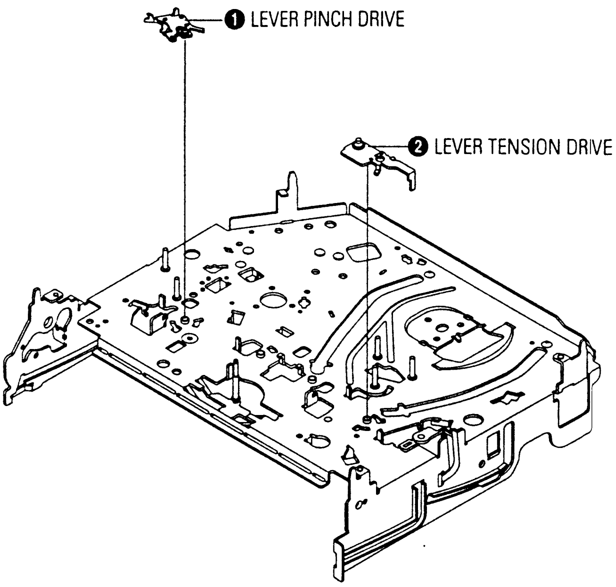

❶ LEVER PINCH DRIVE
❷ LEVER TENSION DRIVE

Fig. 1-15 Lever Pinch Drive, Lever Tension Drive Removal

1-2-11 Lever Tension Ass'y, Band Brake Ass'y Removal

1) Remove the Lever Brake S Ass'y (Refer to Fig 1-17).
2) Remove the Spring Tension Lever ❶.
3) Rotate stopper of Main Base in the direction of arrow "A".
4) Lift the Lever Tension Ass'y ❷ & Band brake Ass'y ❸.

Note :
1) When replacing the Lever Tension Ass'y ❷, be sure to apply Grease on the post,
2) Take care not to touch stain on the felt side, and not to be folder and broken Band brake Ass'y
3) After Lever Tension Ass'y seated, Rotate stopper of Main Base to the Mark[B].

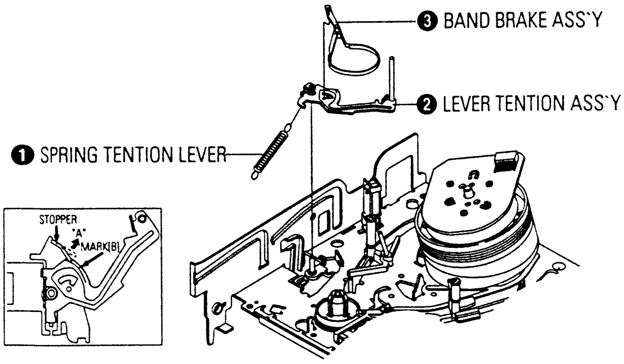

❸ BAND BRAKE ASS'Y
❷ LEVER TENTION ASS'Y
❶ SPRING TENTION LEVER
STOPPER
"A"
MARK(B)

Fig. 1-16 Lever Tension Ass'y, Band Brake Ass'y Removal

1-2-12 Lever Brake S, T Ass'y Removal

1) Release the Hook [A] and the Hook [B], [C] in the direction of arrow as shown in Fig 1-17.
2) Lift the Lever S, T Brake Ass'y ❶, ❷ with spring brake ❸.

Assembly :
1)Assembly the Lever S Brake Ass'y ❶ on the Main Base.
2)Assembly the Lever T Brake Ass'y ❷ with spring brake ❸.

Note : Take extreme care not to be folded and transformed Spring Brake at removing or reinstalling.

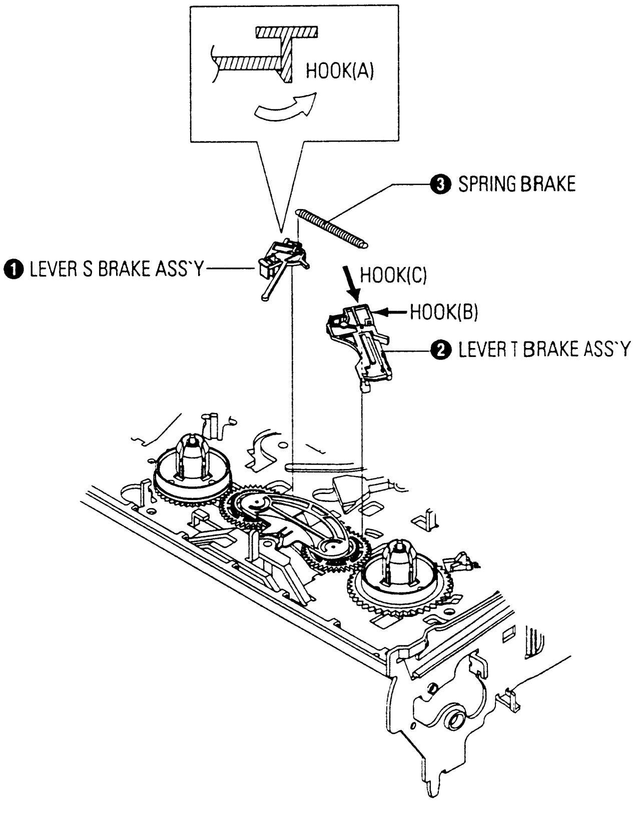

HOOK(A)
❸ SPRING BRAKE
❶ LEVER S BRAKE ASS'Y
HOOK(C)
HOOK(B)
❷ LEVER T BRAKE ASS'Y

Fig. 1-17 Lever Brake S, T Ass'y Removal

1-2-13 Gear Idle Ass'y Removal

1) Push the Lever Idle ❶ in the direction of arrow "A", "B".
2) Lift the Lever Idle ❶.

Assembly :
1) Apply oil in two Bosses of Lever Idle ❶.
2) Assemble the Gear Idle ❷ with the Lever Idle ❶.

Note : When replacing the Gear Idle ❷, be sure to add oil in the boss of Lever Idle ❶.

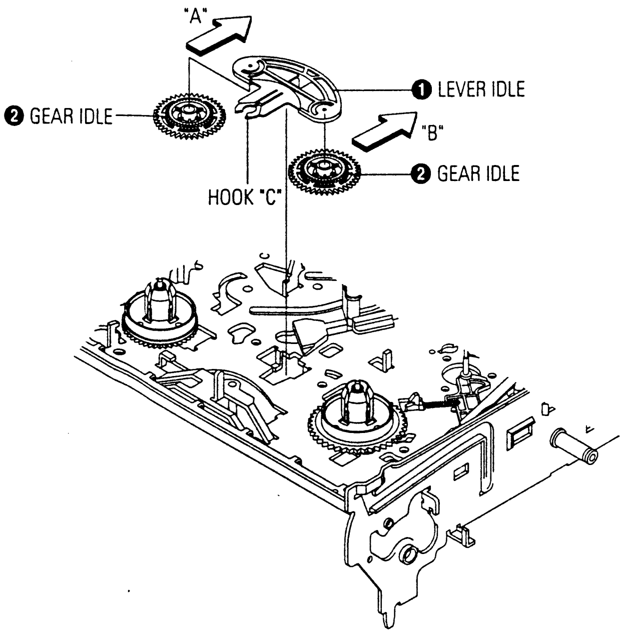

"A"
❶ LEVER IDLE
❷ GEAR IDLE
"B"
❷ GEAR IDLE
HOOK "C"

Fig. 1-18 Gear Idle Ass'y Removal

1-2-14 Disk S, T Reel Removal

1) Lift the Disk S, T Reel ❶, ❷.

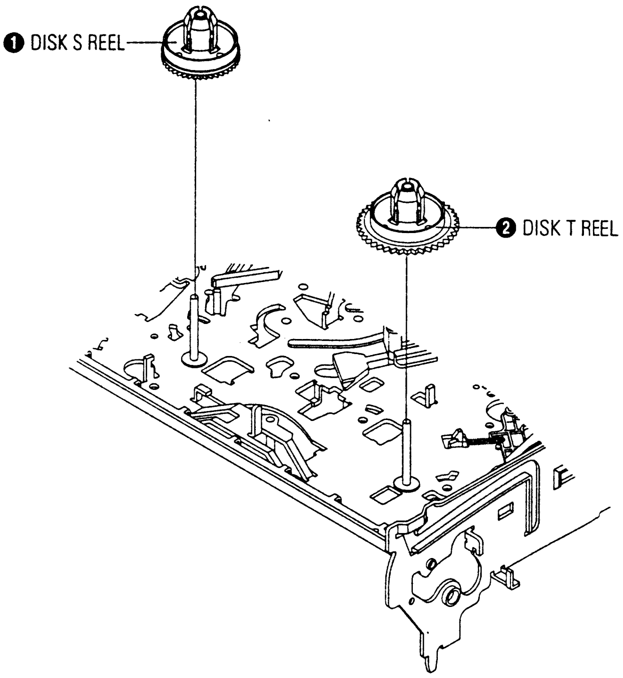
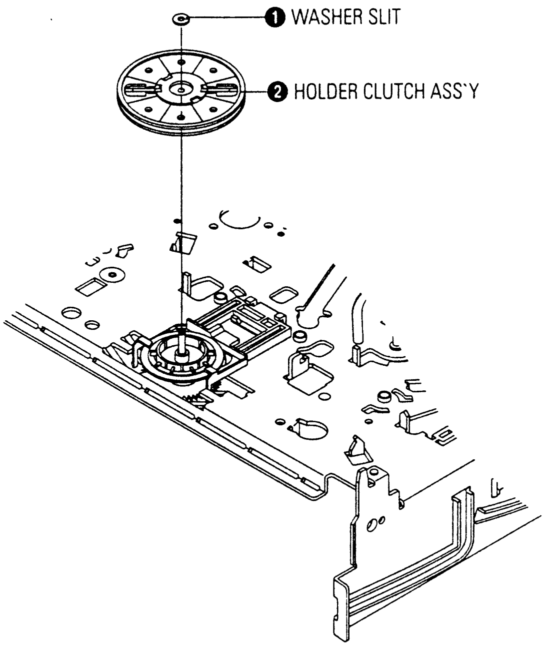

❶ DISK S REEL
❷ DISK T REEL

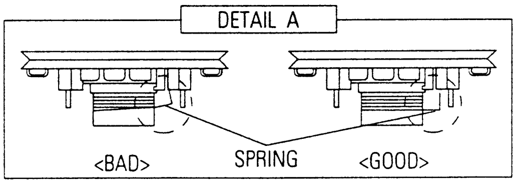
Fig. 1-19 Disk S, T Reel Removal

1-2-15 Holder Clutch Ass'y Removal

1) Remove the Washer Slit ❶.
2) Lift the Holder Clutch Ass'y ❷.

Note : When you reinstall Holder Clutch Ass'y
1) Check the condition of spring as shown in detail A.
2) Don't push Holder Clutch Ass'y down with excessive force Just insert Holder Clutch Ass'y into post center with dead force and Rotate it smoothly.
   Be sure to confirm that spring is in the slit of Gear Center Ass'y as shown in detail B.


❶ WASHER SLIT
❷ HOLDER CLUTCH ASS'Y


DETAIL A
<BAD>
SPRING
<GOOD>

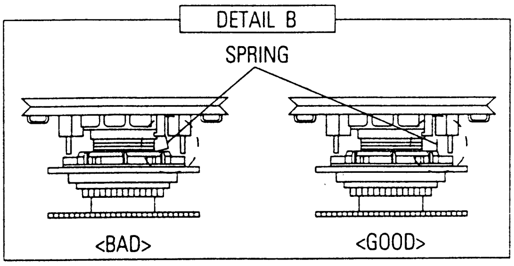

DETAIL B
SPRING
<BAD>
<GOOD>

Fig. 1-20 Holder Clutch Ass'y Removal

1-2-16 Lever Up Down Ass'y, Gear Center Ass'y Removal

1) Remove the 2 hooks in the direction of arrow as shown Fig. 1-21 and lift the Lever Up Down Ass'y ❶.
2) Lift the Gear Center Ass'y ❷.

Assembly :
1) Insert the Lever Up Down Ass'y ❶ in the rectangular holes on Main Base as shown in Fig 1-22.
2) Lift the Lever Up Down Ass'y ❶ about 35°. (Refer to Fig 1-22)
3) Insert Ring of the Gear Center Ass'y ❷ in the Guide of the Lever Up Down Ass'y ❶.
4) Insert the Gear Center Ass'y ❷ in the post on Main Base.
5) Push down the Lever Up Down Ass'y ❶ for locking of the Hook.

Note :
1) Take care not to separate and sentence does not mark sense.
2) Be sure to confirm that Ring of the Gear Center Ass'y ❷ is in the Guide of the Lever Up Down Ass'y ❶ after finishing assembly of Lever Up Down Ass'y ❶ and Gear Center Ass'y ❷.

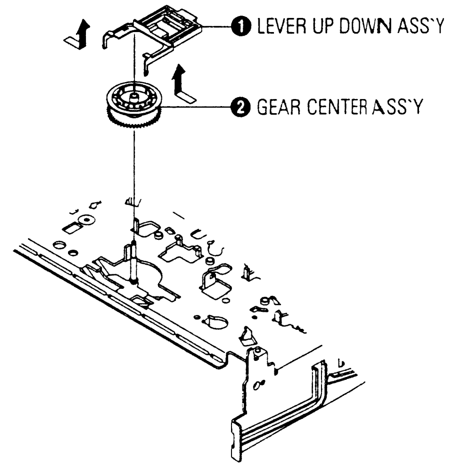

❶ LEVER UP DOWN ASS'Y
❷ GEAR CENTER ASS'Y

Fig. 1-21 Lever Up Down Ass'y Removal

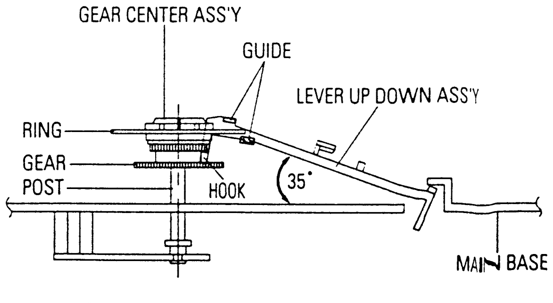

GEAR CENTER ASS'Y
GUIDE
LEVER UP DOWN ASS'Y
RING
GEAR
POST
HOOK
35°
MAIN BASE

Fig. 1-22 Lever Up Down Ass'y Removal

1-2-17 Guide Cassette Door Removal

1) Lift the Hook [A].
2) Rotate the Guide Cassette Door ❶ in the direction of arrow.

Note : After reinstalling the Guide Cassette Door ❶ sure the Hook [A].

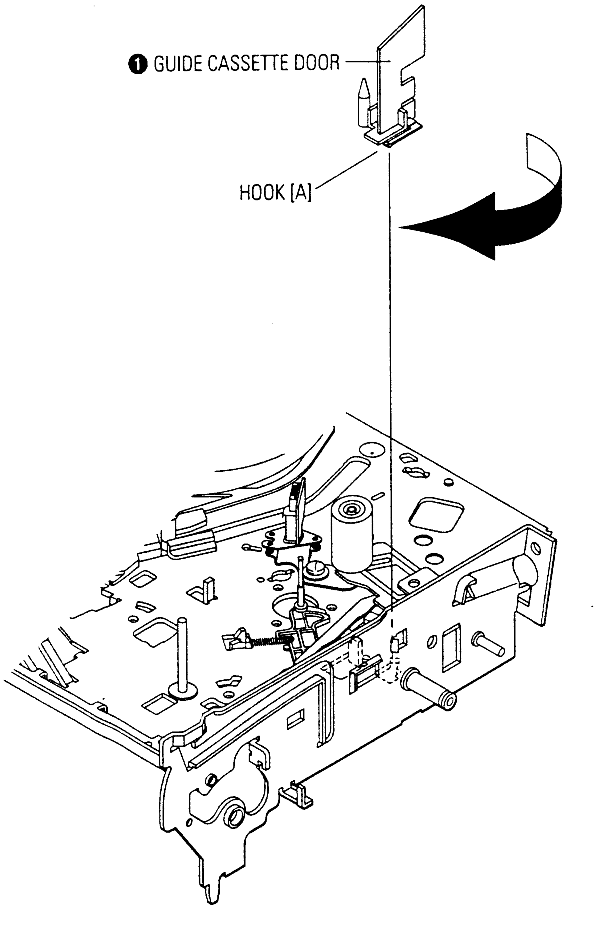

❶ GUIDE CASSETTE DOOR
HOOK [A]

Fig. 1-23 Guide Cassette Door Removal

1-2-18 Lever Unit Pinch Ass'y, Plate Joint, Spring Pinch Drive Removal

1) Lift the Unit Pinch Ass'y ❶.
2) Remove the Plate Joint ❷ from Lever Pinch Drive.
3) Remove the Spring Pinch Drive ❸.

Note :
1) Take extreme care not to touch the grease on the Roller Pinch.
2) When reinstalling, be sure to apply grease on the post pinch roller.

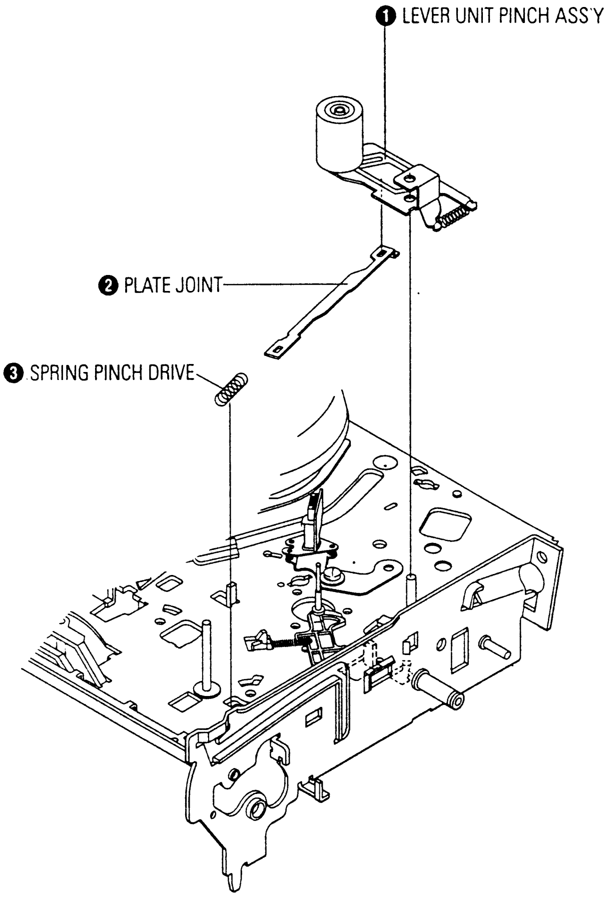

❶ LEVER UNIT PINCH ASS'Y
❷ PLATE JOINT
❸ SPRING PINCH DRIVE

Fig. 1-24 Lever Unit Pinch Ass'y, Plate Joint, Spring Pinch Drive Removal

1-2-19 Lever #9 Guide Ass'y Removal

1) Remove the Spring #9 Guide ❶.
2) Lift the Spring #9 Guide Ass'y ❷ in the direction of arrow "A".

Note :
1) Take extreme care not to get grease on the tape Guide Post.
2) After reinstalling, check the bottom side of the Post #9 Guide to the top side of Main Base.

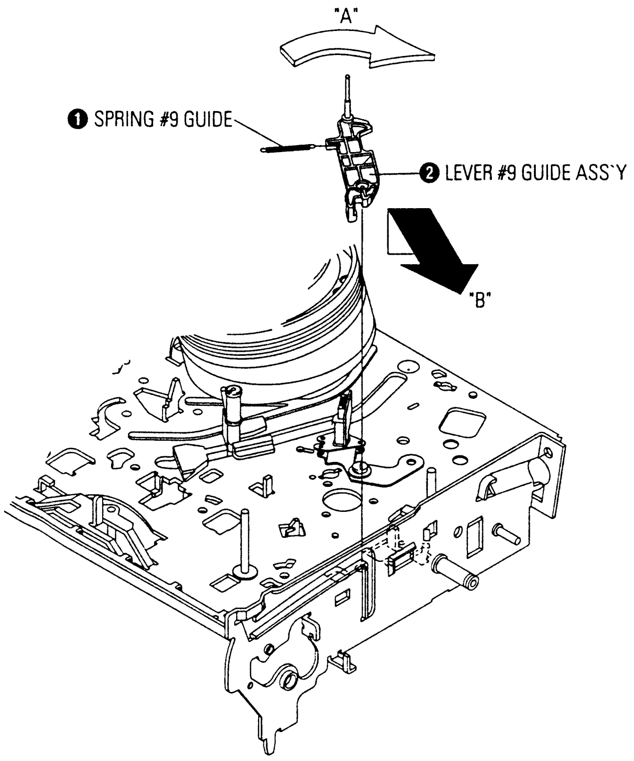


Fig. 1-25 Lever #9 Guide Ass'y Removal

1-2-20 FE Head Removal

1) Remove the screw ❶.
2) Lift the FE Head ❷.

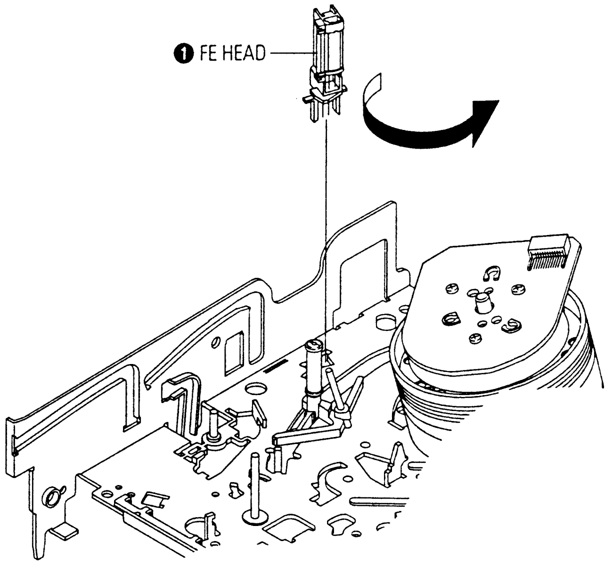


Fig. 1-26 FE Head Removal

1-2-21 ACE Head Removal

1) Pull out the FPC from connector of ACE Head Ass'y ❷.
2) Remove the screw ❶.
3) Lift the ACE Head Ass'y ❷.

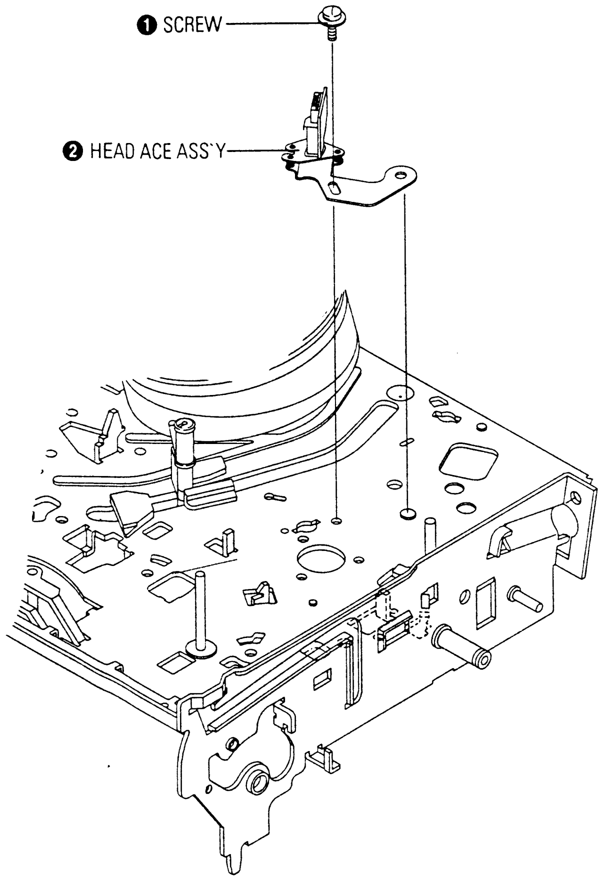

❶ SCREW
❷ HEAD ACE ASS'Y

Fig. 1-27 ACE Head Removal

1-2-22 Slider S, T Ass'y Removal

1) Move the Slider S, T Ass'y ❶, ❷ to slot, and then lift it to remove. (Refer to arrow)

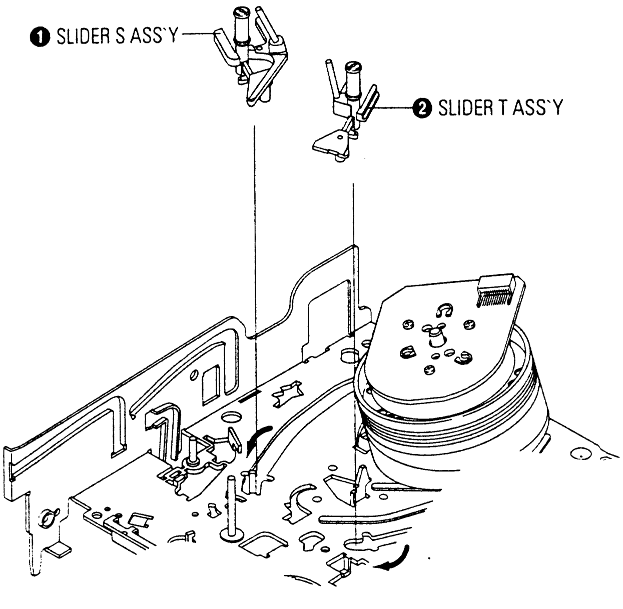

❶ SLIDER S ASS'Y
❷ SLIDER T ASS'Y

Fig. 1-28 Slider S, T Ass'y Removal

1-2-23 Plate Ground Deck, Cylinder Ass'y Removal

1) Remove the 3 Screws ❶.
2) Lift the Plate Ground Deck ❷.
3) Lift the Cylinder Ass'y ❸.

Assembly :
1) Match the 3 holes in the bottom of Cylinder ass'y ❸ to the 3 holes of Main Base as attending not to drop or knock the Cylinder ass'y ❸.
2) Tighten the 1 Screw ❶.
3) Match the Plate Ground Deck ❷ to the Hole of Base Main.
4) Tighten the other 2 Screws ❶.

Note :
1) Take care not to touch the Cylinder Ass'y ❸ and the tape guide post at reinstalling.
2) When reinstalling, Don't push down too much on Screw Driver.

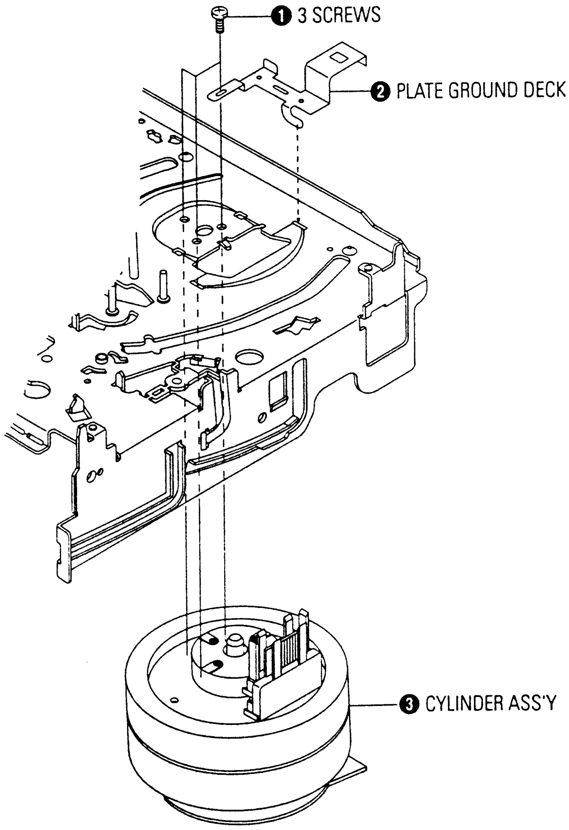

❶ 3 SCREWS
❷ PLATE GROUND DECK
❸ CYLINDER ASS'Y

Fig. 1-29 Plate Ground Deck, Cylinder Ass'y Removal

1-2-24 Belt Pulley Removal

1) Remove the Belt Pulley ❶.

Note : Take extreme care not to get grease on Belt Pulley ❶ at assembling or reassembling.

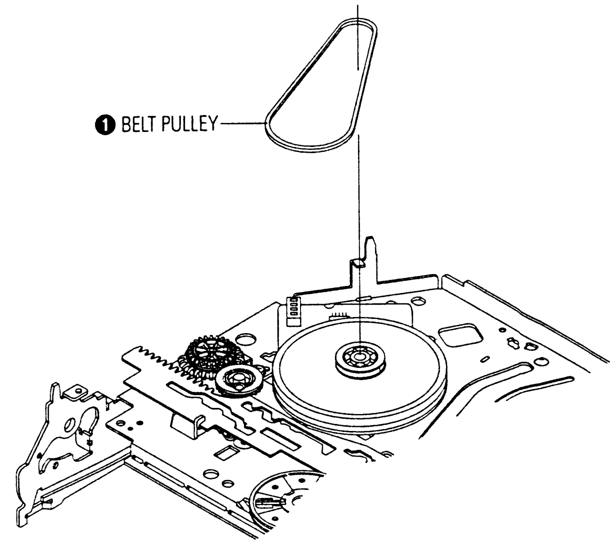

❶ BELT PULLEY

Fig. 1-30 Belt Pulley Removal

1-2-25 Level Head Cleaner Ass'y Removal (Optional)

1) Release the Hook ❶.
2) Lift the Lever Head Cleaner Ass'y ❷.

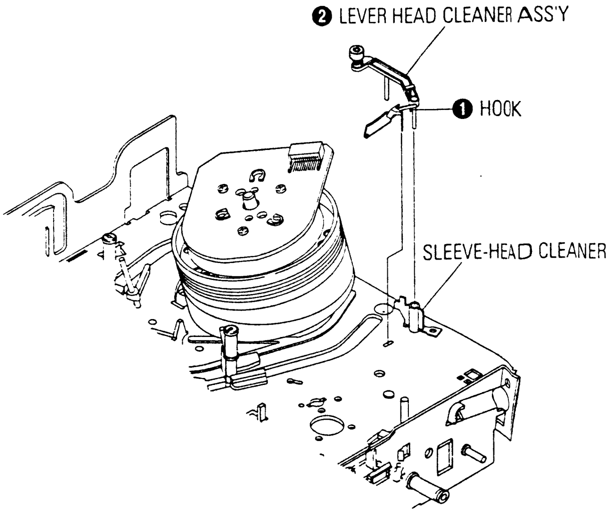

❷ LEVER HEAD CLEANER ASS'Y
❶ HOOK
SLEEVE-HEAD CLEANER

Fig. 1-31 Level Head Cleaner Ass'y Removal

1-2-26 Damper Capstan, Motor Capstan Ass'y Removal

1) Remove the Damper Capstan ❶ in the direction of arrow.
2) Remove the 3 Screws ❷.
3) Remove the Motor Capstan Ass'y ❸.

Assembly :
1) Match the 3 holes of Motor Capstan Ass'y ❸ to the 3 holes of Main Base. Be careful not to drop or knock the Motor Capstan Ass'y ❸.
2) Tighten the 3 Screws ❷ in the direction of arrow as shown detail drawing.
3) Assemble the Damper Capstan ❶.

Note : After tightening screws, check if there is gap between the head of screws and the top side of Main Base. There should have no gap between the head of screws and the top side of Main Base.
After reinstalling, adjusting the tape transport system again.

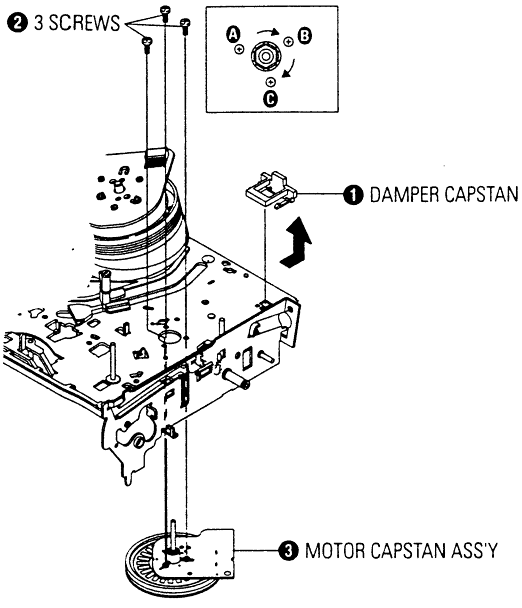


Fig. 1-32 Damper Capstan,Motor Capstan Ass'y Removal

1-2-27 How to Eject the Cassette Tape (If the unit does not operate on condition that is inserted into housing ass'y)

1) Turn the Gear worm ❶ clockwise with screw driver.(Refer to arrow)
(Other method : Remove the Screw of Motor Load Ass'y, Separate the Motor Load Ass'y)

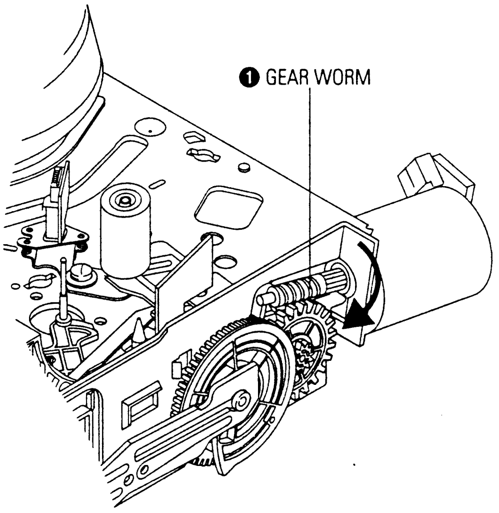


Fig. 1-33

2) When Slider S,T are approched in the position of unloading, rotate holder Clutch counterclockwise after inserting screw driver in the hole of frame's bottom in order to wind the unwinded tape. (Refer to Fig.1-34)
(If you rotate Gear Worm ❶ continuously when tape is in state of unwinding, you may cause a tape contamination by grease and tape damage. Be sure to wind the unwinded tape in the state of set horizently.)
3) Rotate Gear Worm ❶ clockwise using screw driver again up to the state of eject mode and then pick out the tape.(Refer to Fig.1-33)

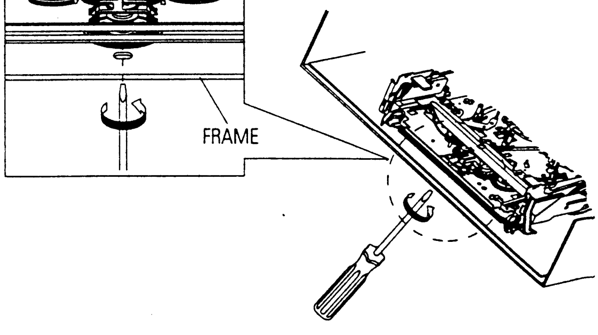


Fig. 1-33

1-3 The table of clearing, Lubrication and replacement time about principal parts

1) The replacement time of parts is not life of parts.
2) The table 1-1 is that the VCR Set is in normal condition (normal temperature, normal humidity).
The checking period may be changed owing to the condition of use, runtime and environmental conditions.
3) Life of the Cylinder Ass'y is depend on the condition of use.
4) See exploded view for location of each parts.

<Table 1-1>

	Parts Name	Checking Period										Remark
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000	
TAPE PATH SYSTEM	POST TENSION	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	- To clean the parts, use patch and alcohol (solvent). - After cleaning, use the video tape after alcohol is gone away completely. - We recommend to use oil (EP-50) or solvent. - One or two drops of oil should be applied after cleaning with alcohol.
	SLANT POST S, T	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#8 GUIDE SHAFT	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	CAPSTAN SHAFT	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#9 GUIDE POST	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	#3 GUIDE POST	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	
	GUIDE ROLLER S, T	Δ	Δ	Δ	0	0	0	0	0	0	0	
	CYLINDER ASS'Y	Δ	0	0	0	0	0	0	0	0	0	
	FE HEAD	Δ	Δ	Δ	0	0	0	0	0	0	0	
	ACE HEAD	Δ	0	0	0	0	0	0	0	0	0	
	PINCH ROLLER	Δ	0	0	0	0	0	0	0	0	0	
	POST REEL S, T		◆		◆		◆		◆		◆	- Periodic time of applying oil (Apply oil after cleaning) - The excessive applying oil may be the cause of malfunction.
	SLEEVE TENSION		◆		◆		◆		◆		◆	
	POST CENTER		◆		◆		◆		◆		◆	
	LEVER IDLE BOSS (2Point)		◆		◆		◆		◆		◆	
DRIVING SYSTEM	CAPSTAN MOTOR PULLEY	Δ	Δ	Δ	Δ	Δ	0	0	0	0	0	
	BELT PULLEY				0	0	0	0	0	0	0	
	HOLDER CLUTCH ASS'Y	Δ	0	0	0	0	0	0	0	0	0	
	GEAR CENTER ASS'Y		0	0	0	0	0	0	0	0	0	
	GEAR IDLE (2Point)		0	0	0	0	0	0	0	0	0	
	LOADING MOTOR		0	0	0	0	0	0	0	0	0	
BRAKE SYSTEM	BAND BRAKE ASS'Y		0	0	0	0	0	0	0	0	0	
	BRAKE T ASS'Y		0	0	0	0	0	0	0	0	0	

Δ : Cleaning O : Check and replacement in necessary ◆ : Add Oil

2. Alignment and Adjustment

2-1 Tape Transport System and Adjustment Locations

The tape transport system has been adjusted precisely in the factory. Alignment is not necessary except for the following :

1) Noise observed on the screen.
2) Tape damage.
3) Parts replacement in the tape transport system.

Lower flange height of tape guide is used as the reference for the transport adjustment.
To maintain the height of the tape guide and prevent damage, do not apply excessive force onto the main base.

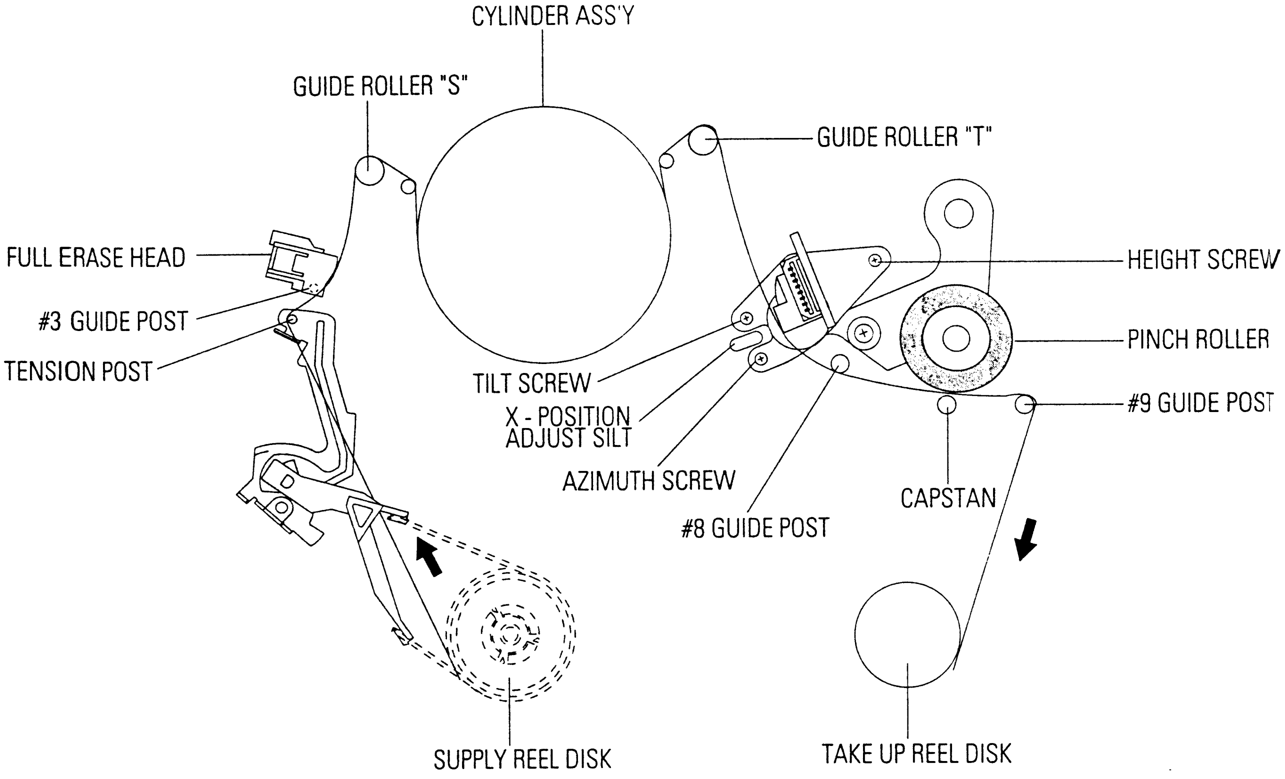

CYLINDER ASS'Y
GUIDE ROLLER "S"
GUIDE ROLLER "T"
FULL ERASE HEAD
#3 GUIDE POST
TENSION POST
HEIGHT SCREW
PINCH ROLLER
#9 GUIDE POST
TILT SCREW
X - POSITION ADJUST SILT
AZIMUTH SCREW
#8 GUIDE POST
CAPSTAN
SUPPLY REEL DISK
TAKE UP REEL DISK

Fig. 2-1 Location of Tape Transport Adjustment

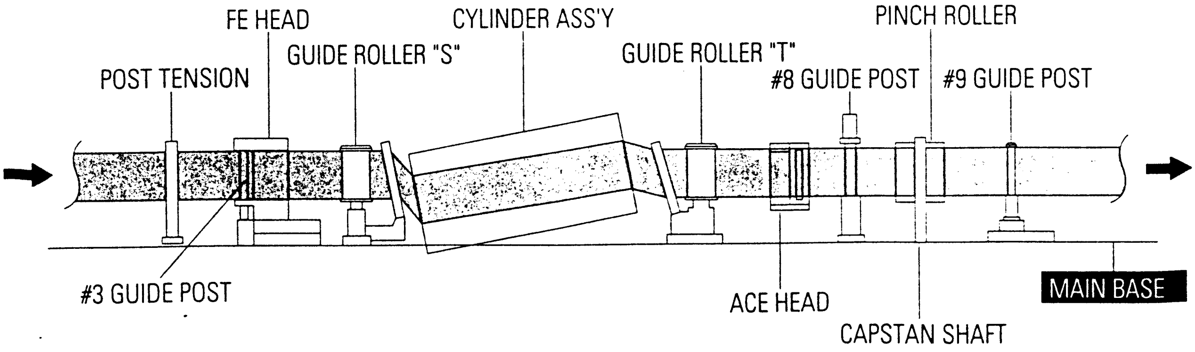

FE HEAD
CYLINDER ASS'Y
PINCH ROLLER
GUIDE ROLLER "S"
GUIDE ROLLER "T"
POST TENSION
#8 GUIDE POST
#9 GUIDE POST
#3 GUIDE POST
ACE HEAD
MAIN BASE
CAPSTAN SHAFT

Fig. 2-2 Tape Travel Diagram

2-2 Tape Transport System Adjustment

When parts are replaced, perform the required adjustments by referring to procedures for the tape transport system. If there are any changes to the tape path, first run a T-120 tape and make sure excessive tape wrinkle does not occur at the tape guides.

1) If tape wrinkle is observed at the guide roller S, T, turn the guide roller S, T until wrinkle disappears.
2) If the tape wrinkle is still observed at the tape guide, perform the tilt adjustment of the ACE head. (See "2. Alignment and Adjustment" of the Service Manual for Test Point Locations.)

2-2-1 ACE Head Assembly Adjustment

2-2-1(a) ACE HEAD HEIGHT ADJUSTMENT

1) Run the alignment tape (Color bar) in the playback mode.
2) Observe surface of the audio head using a dental mirror.
3) Turn screw (C) clockwise or counterclockwise until the gap of lower tape edge and the lower edge of the control head is about 0.25mm. (Refer to Fig. 2-3 and 2-4)

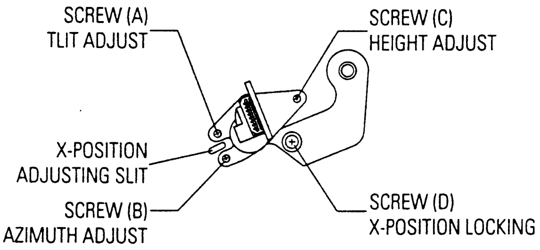


Fig. 2-3 Location of ACE Head Adjustment Screw

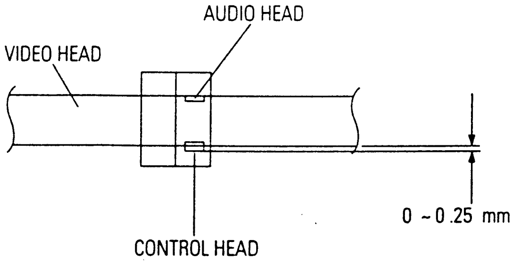


Fig. 2-4 ACE Head Height Adjustment

2-2-1(b) ACE HEAD TILT ADJUSTMENT

1) Playback a blank tape and observe the position of the tape at the lower flange of tape guide.
2) Confirm that there is no curl or wrinkle at the lower flange of tape guide as shown in Fig. 2-5 (B).
3) If a curl or wrinkle of the tape occurs, slightly turn the screw (A) tilt adjust on the ACE head ass'y.
4) Reconfirm the ACE head height.

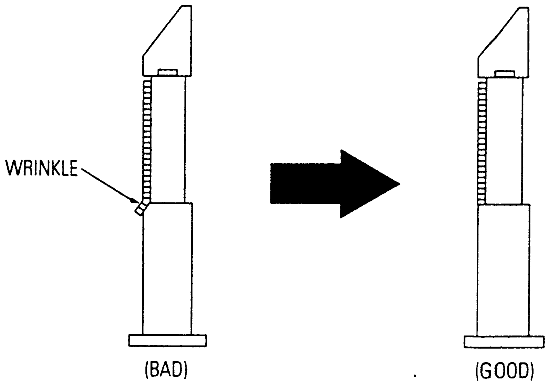


Fig. 2-5 Tape Guide Check

2-2-1(c) AUDIO AZIMUTH ADJUSTMENT

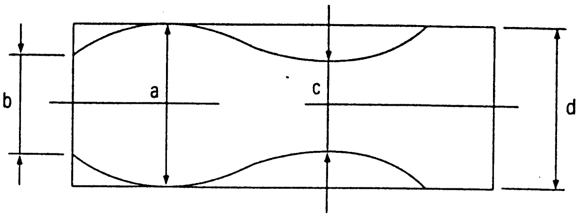
1) Load alignment tape (Mono scope) and playback the NTSC : 7KHz (PAL : 6KHz) signal.
2) Connect channel-1 scope probe to audio output test point.
3) Adjust screw (B) to achieve maximum audio level. (See Fig. 2-3)

2-2-1(d) ACE HEAD POSITION (X-POINT) ADJUSTMENT

1) See "2. Alignment and Adjustment" for ACE Head position (X-Point) adjustment.

2-2-2 Linearity adjustment (Guide roller S, T adjustment)

1) Playback the Mono Scope alignment tape (SP mode).
2) Observe the video envelope signal on an oscilloscope (triggered by the video switching pulse).
3) Make sure the video envelope waveform (at its minimum) meets the specification shown in Fig. 2-6.
   If it does not, adjust as follows :



a b c d
c,b,d/a ≥63%

Fig. 2-6 Envelope Waveform Adjustment

Note :
a=Maximum output of the video RF envelope.
b=Minimum output of the video RF envelope at the entrance side.
c=Minimum output of the video RF envelope at the center point.
d=Maximum output of the video RF envelope at the exit side.

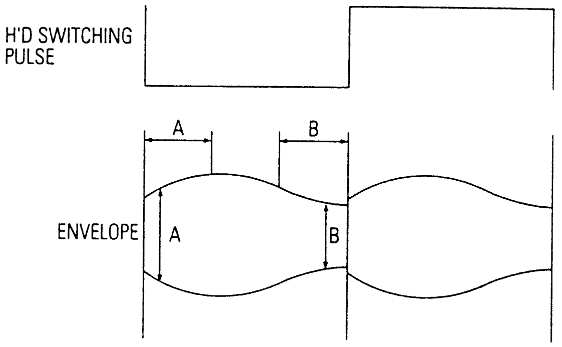

H'D SWITCHING PULSE
A
B
ENVELOPE
A
B

Fig. 2-7 Adjustment Points

4) If the section A in Fig. 2-7 does not meet the specification, adjust the guide roller S up or down.
5) If the section B in Fig. 2-7 does not meet the specification, adjust the guide roller T up or down.
6) Play back the Mono Scope alignment tape (SP mode).
7) Connect an oscilloscope CH-1 to the Envelope and CH-2 to the H'D SW Pulse for triggering.
8) Turn the guide roller heads with a flat head (▬) driver to obtain a flat video RF envelope as shown in Fig. 2-8.

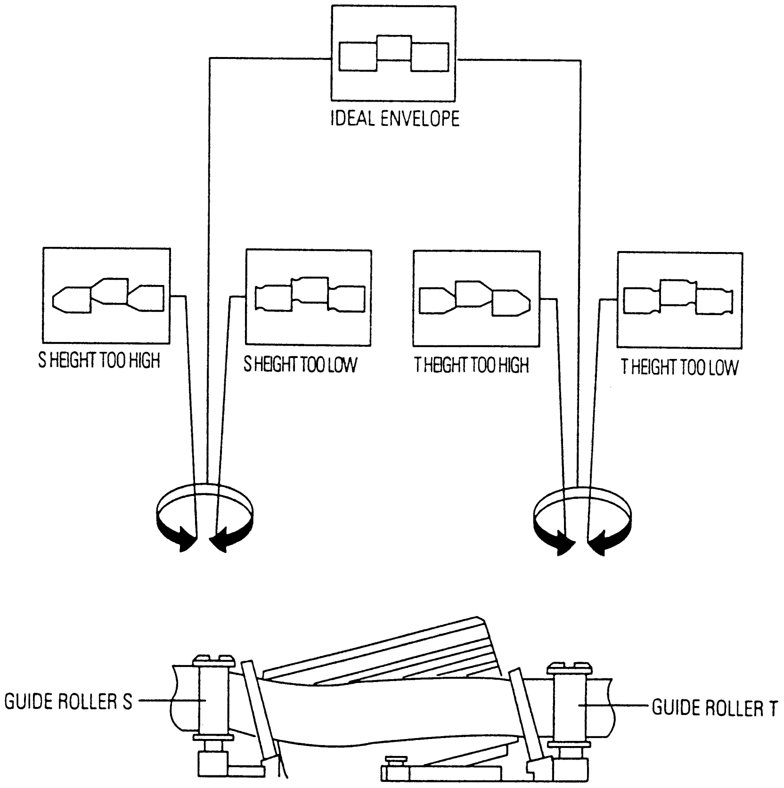

IDEAL ENVELOPE
S HEIGHT TOO HIGH
S HEIGHT TOO LOW
T HEIGHT TOO HIGH
T HEIGHT TOO LOW
GUIDE ROLLER S
GUIDE ROLLER T

Fig. 2-8 Guide Roller S, T Height Adjustment

2-2-3 Check Transitional Operation from RPS to Play

Check transition from RPS mode to play mode :
Using a pre-recorded SP tape, make sure the entry side of envelope comes to an appropriate steady state within 3 seconds (as shown in Fig. 2-9).
If the envelope waveform does not reach specified peak-to peak amplitude within 3 seconds, adjust as follows :

1) Make sure there is no gap between the supply roller lower flange and the tape.
If there is a gap, adjust the supply guide roller again.
2) Change operation mode from the RPS to the play mode (again) and make sure the entry side of envelope rises within 3 second.

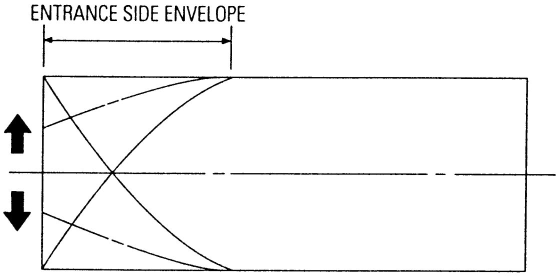


Fig. 2-9 Video Envelope Rising when Operation mode Changes from RPS to Play Mode

2-2-4 Envelope Check

1) Make recordings on T-120 (E-120) and T-160 (E-180) tape.
Make sure the playback output envelope meets the specification as shown in Fig. 2-10.
2) Play back a self recorded tape (recording made on the unit using with T-120 (E-120).
The video envelope should meet the specification as shown in Fig. 2-10.
In SP mode, (A) should equal (B).
If the head gap is wide, upper cylinder should be checked.

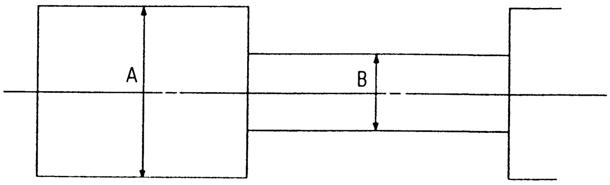


Fig. 2-10 Envelope Output and Output Level

2-2-5 Tape Wrinkle Check

1) Run the T-160 (E-180) tape in the playback, FPS, RPS and Pause modes and observe tape wrinkle at each guide.
2) If excessive tape wrinkle is observed, perform the following adjustments in Playback mode :

- Tape wrinkle at the guide roller S, T section :
Linearity adjustment.
- Tape wrinkle at tape guide flange :
ACE head assembly coarse adjustment.

2-3 Reel Torque

1) The rotation of the capstan motor causes the Holder Clutch Ass'y to rotate through the Belt Pulley.
2) The spring wrap PLAY/REV of holder clutch ass'y drives the disk reel S, T through gear idle by rotation of gear center ass'y.
3) Brake is operated by slider cam at FF/REW mode.
4) Transportation of accurate driving force is done by gears. (Gear Center Ass'y)

Note : If the spec. does not meet the followings specifications, replace the holder clutch ass'y and then recheck.

<Table 2-1>

MODE	TORQUE g/cm	GAUGE
PB	42 ± 11	Cassette Torquemeter
RPS	145 ± 30	Cassette Torquemeter